

A Comprehensive Multiplication Program



MVM MULTIPLE WAYS MULTIPLICATION

The Positive Engagement Project recognizes that every person who knows how to multiply quickly in their head has an advantage over those who can't. Multiplication automaticity is an essential life skill. A major problem in schools today is that many students enter 5th grade lacking the basic multiplication fluency skills needed to solve complex math concepts, and the struggle to solve these problems may restrict them from enjoying mathematics.

Learning your multiplication tables ensures that you can compute quickly and accurately and frees your mind to tackle more complex operations and concepts.

We cannot go through life hoping that a calculator will be handy every time we need to multiply two numbers or figure out a discount on a sale item or determine whether we've been overcharged for 12 gallons of gas at \$3.95 a gallon.

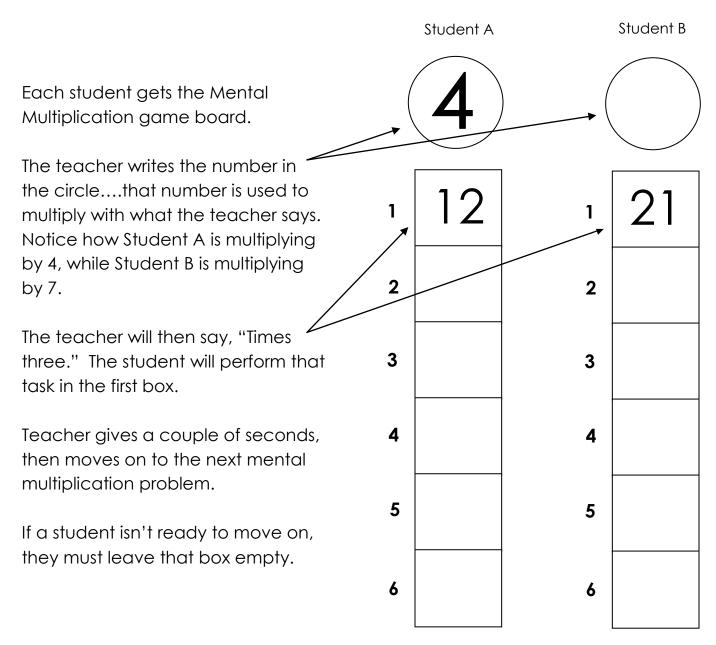
Multiple Ways Multiplication (MWM) is set up for students to build on their multiplication fluency with a variety of different activities. Our activities vary from backwards thinking to mental multiplication to answering word problems three different ways. We have multiple versions of each activity for multiplication facts two through twelve. We will give a brief description of each activity and then explain how to use them all in the MWM program.





What is Mental Multiplication?

Mental Multiplication is an activity that you do whole group. This is a great whole group activity because you can have students at different stages in multiplication, but still play the game the same way.



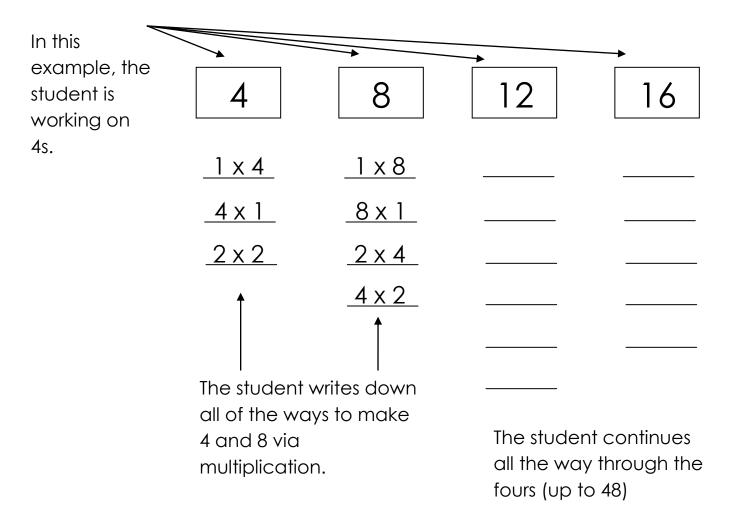
As you can see, this is a fast paced game that allows students to be on different numbers, but perform the same task asked by the teacher.





What is Find The Factors?

Find The Factors is an individual activity that has students show as many ways to make a certain product. Lines are provided to give the students a hint to how many options there is.



In this activity, students are working on their ability to see the multiple ways to make each of the products.

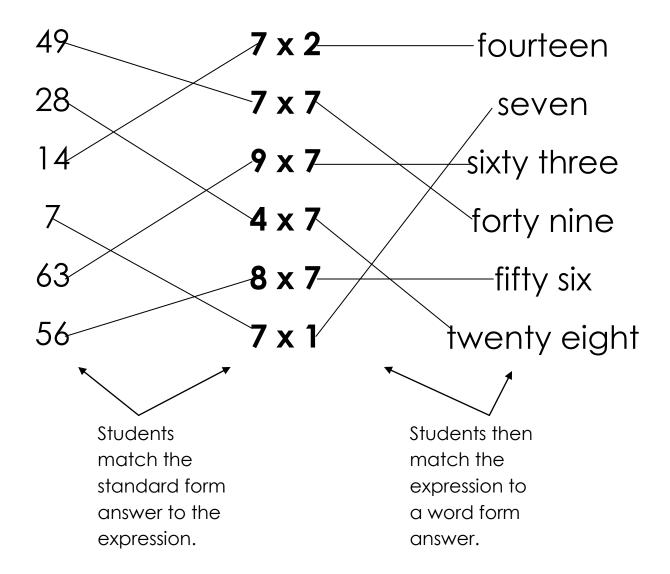
*For certain numbers that require a factor larger than twelve, there will be a box instead of a line to show the students that they may not know this one...examples 2 x 24 or 3 x 16. We encourage them to try to solve it, but boxed answers aren't mandatory to be completed.





What is Multiplication Match?

Multiplication Match is an individual activity that has students match an expression with two different forms of an answer: one in standard form and the other in word form.



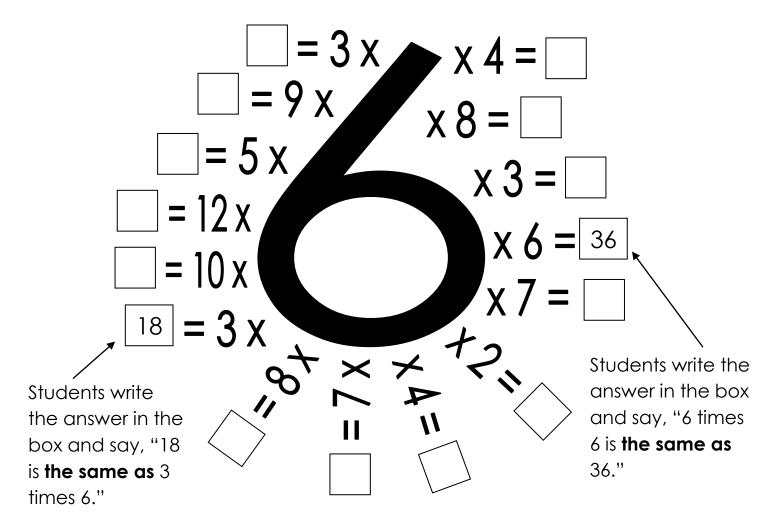
The beauty of this activity is that the students are getting exposure to 7×2 two different times in two different ways (standard and word form).





What is Left-Right Write?

The purpose of this activity is to see that it doesn't matter which direction a multiplication problem is written or read. For some reason, students get highly distracted when they see a problem like this: $36 = 6 \times 6$. Left-Right Write let's students practice their multiplication on both the left and right sides of the equal sign!



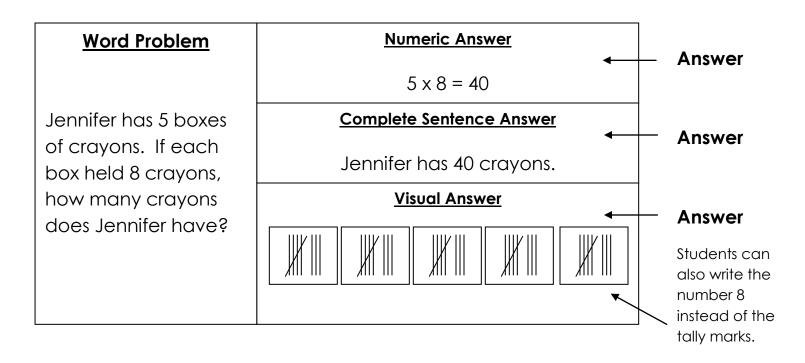
Left-Right Write functions even better if we have our students read the equation as they fill in their completed products. If we can get our kids to see that an equal sign literally means "the same as" then we can make significant strides in clearing up any distractions they have when expressions are written from a different direction.





What is Answer-Answer-Answer?

Answer-Answer is when a student takes a word problem and answers it three different ways. Keep in mind that these word problems are very contrived and the multiplication problem and solution are more than on the surface, but that's okay...that's what we want. In this activity, students are to answer a word problem numerically, in a complete sentence, and finally with a visual.



The purpose of Answer-Answer-Answer is to get our students to not only learn multiplication, but to see how all three of the answers represent the same product.

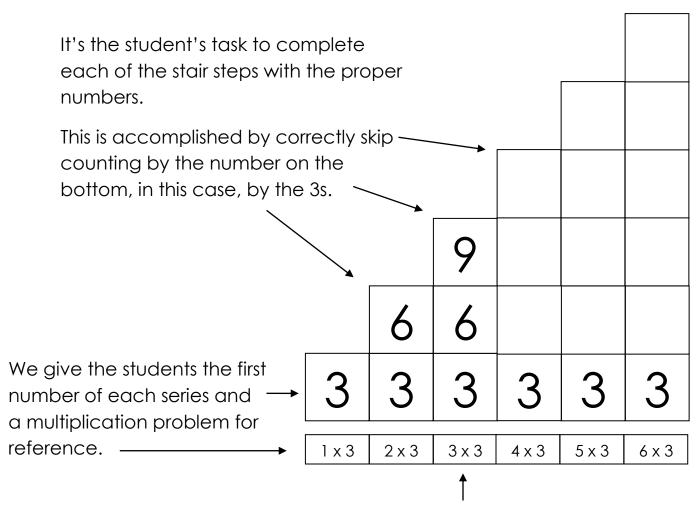
This activity allows students to see the written numeric answer...not shocking; this is what they're the most use to. It also has them use the answer in a complete sentence. Many assessments use words and numbers for answers in word problems. Finally, the visual answer lets the student put the word problem into a non-linguistic form that assists them with their understanding of multiplication.





What is Stair Steps?

Stair Steps is a fun way for students to work on both their multiplication and skip counting.



This expression states that there are three groups of three.

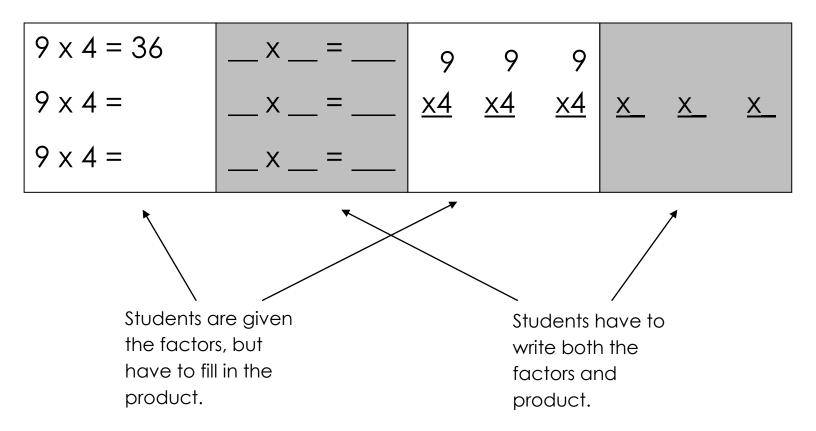
Stair Steps is a great activity to reinforce skip counting and how that skill relates to multiplication. The harder version of this activity is not to have the stair steps in ascending order. You can decide what version your students use. Mix it up and differentiate for your students which version is used.





What is Talk The Talk?

Sometimes students just need to say their multiplication facts out loud. Talk The Talk gives them the opportunity to do just that. The multiplication facts are set up in a way that allows students to practice a certain fact a dozen times while they say it out loud and write it.



Talk The Talk requires the student to say each problem as they fill in the missing pieces. Also, as an added feature, students get practice with the same problem both horizontally six times and vertically six times, for a total of twelve repetitions. In multiplication, repetition is a good thing!





What is 52 Flip?

Keeping with the idea that MWM provides different options for kids to practice their multiplication, 52 Flip uses a deck of cards to assist this activity. Each card represents a factor to be multiplied (in this example by 8.)

King=12 Jack=10 Queen=11 Ace=1 A key shows how the face cards and ace are to be used Multiply By 8 as factors. The title indicates what to 16 multiply each card by. 88 Place Deck Here Place X Card Here 56 52 Flip has separate places for the deck of cards and card to multiply by. 52 spaces are provided - one for each card in the deck to multiply by.

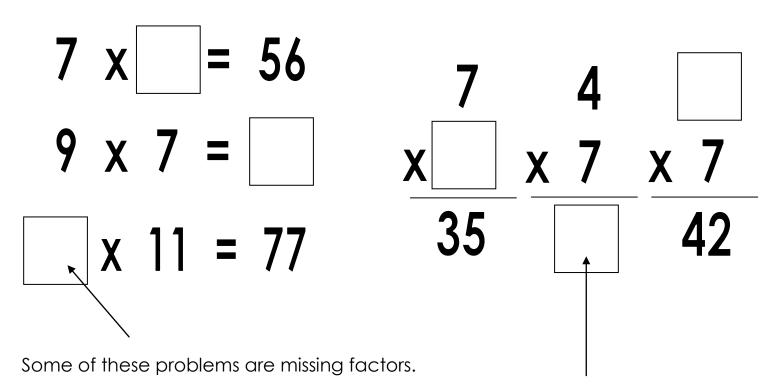
As a student takes a card from the deck, they place it face up and multiply it by eight. Two – four students can do this activity at the same time and all be at different stages with their multiplication.





What is What Is Missing?

What Is Missing? is an activity that encourages students to use what they know by connecting their knowledge to the hints given in the problems. This fast and fun activity is written both horizontally and vertically so students can see the expressions two different ways.



Some of these problems are missing the product.

There will even be a few problems that are missing both factors.

In each problem the students have to figure out what is missing. In some cases it is one of the factors, in others it is the product itself. Having students think backwards to solve problems is an important mathematical skill. Also, finding missing factors within a problem is a good stepping stone into the world of algebra for our students.





What is Repeat That?

Multiplication is more than repeated addition, but it can't be ignored. When we multiply, we put equal groups together to find the total. We can solve multiplication number sentences by adding the same number over and over again. Repeat That has students create either the multiplication sentence or the repeated addition sentence.

Multiplication Sentence	Repeated Addition Sentence		
5 x 3 = 15	3 + 3 + 3 + 3 + 3 = 15		
3 x 7 = 21	7 + 7 + 7 = 21		
4 x 3 =	<u>†</u>		
3 x 9 =			
8 x 3 = ↑			

We give the students the multiplication number sentence without the answer. The student must come up with the answer, then move on to the repeated addition sentence.

Once the student solves the product of the multiplication sentence, they show the same problem and answer, but this as a repeated addition sentence.

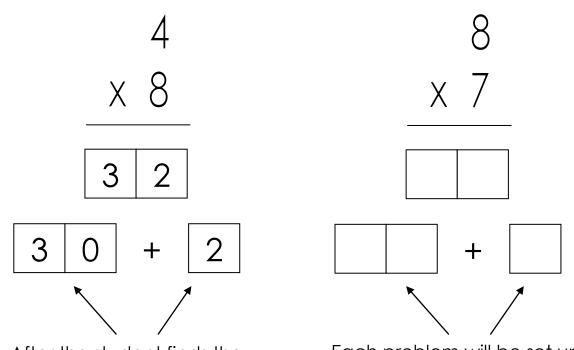
We understand that this probably won't be the most popular of MWM activities, but it's a good skill for the kids to have. We purposefully didn't make this a massive activity, but rather we chose to keep it a solid sample size that hit the concept of repeated addition.





What is Expand The Value?

In an effort to layer on multiple mathematical skills, Expand The Value is an activity that has the students show the value of each digit in the product once it has been solved.



After the student finds the product, they have to with the proper squares for expand the answer to show the value of each digit.

Each problem will be set up with the proper squares for the students to identify the values of both the tens and ones places. If a product goes to the hundreds, the necessary boxes will be

available.

The whole idea of MWM is to give our students more insight on multiplication compared to the standard drill and kill worksheet. We want our students to know their multiplication facts with automaticity, but we want them to understand what these numbers truly mean. Expand The Value gives students multiplication practice and some tools to write the product in expanded form.





What is Prime Time?

While Expand The Value helped students layer on the skill of expanded form, Prime Time has students break down their answer into prime factorization.

Once the student finds the product, they can begin the process prime factorization.

The first branches on the factor tree can be the factors used in the problem.

Have kids circle the digits when they become prime.

student.

In Prime Time, the problem will only give two branches to start with.

The rest will be up to the

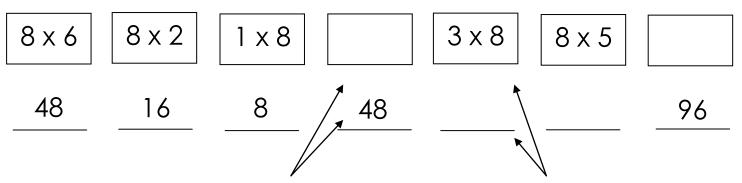
Breaking numbers down to their prime is an important skill. Prime numbers are the building blocks of all numbers. We want students to play with multiplication and to start seeing numbers as patterns and mini multiplication problems. Finding the prime factorization usually only requires knowing the first five or so prime numbers.





What is Put It All Together?

Put It All Together is the cumulative test that really shows if students know their multiplication facts. It is designed to be a timed test, but instead of the traditional version, Put It All Together makes students show either the product of two factors or the two factors that make a certain product.



If the product is presented for the student, it is their responsibility to come up with the expression that matches the product.

If the expression is given in the box, the student must come up with the product of the two given factors.

With this type of activity, students have to be able to work forwards and backwards with their thinking. Coming up with the product is easier than trying to determine the factors needed to multiply together. With that stated, there is an increased rigor and expectation that allows the students to use a deeper understanding of multiplication.

Put It All Together is the assessment piece of MWM. We know speed and accuracy are essential traits of multiplication automaticity. Therefore, we let the teacher decide on the time limit for this final activity. Since this is the assessment piece, we have included multiple versions with question order slightly altered.





How do you use MWM in a classroom?

Multiple Ways Multiplication is set up with twelve activities and one timed assessment tool to be used at the end of your weekly session. The intent is for MWM to be used daily, only a few minutes a day to give your students time to work with multiplication in different ways.

The order in which you choose to use the MWM activities is completely up to the teacher. You can use any of the twelve activities in the order you see fit. We have twelve unique activities for each number from 2-12, and one timed assessment. That means that there are three weeks worth of multiplication instruction available to the teacher for each digit 2-12!

Do all students do the same activity at the same time?

It makes sense to have all your students working on the same activity at the same time...here is why: MWM is self-leveling according to student ability and all practice formats work the same regardless of the level a student is working on. A teacher can have students working on two or three different multiplication numbers (4s, 6s, and 8s) in the classroom and still have the luxury of using only one set of directions for everyone. If it's Monday and you want everyone doing the Multiplication Match activity, you can! The rules for the activity are the same, but give different students different versions: 4s for the students on 4s and 6s for the students on 6s and so on.





How does a student advance from one multiplication number to the next?

If you were to do four activities from MWM Monday through Thursday, that would let you use Friday as the students' test day. If a student is able to pass the Put It All Together assessment in the time you've set, then that student can move on to the next number in their multiplication table.

If the student is unable to pass the test, you still have eight more different activities from MWM to do with them in the upcoming weeks. At which point they can take the Put It All Together assessment again.

Why are there different versions for some of the activities?

We have included different versions for most of the activities in MWM to give you options. The more options you have, the more opportunities you can provide for your students to succeed with learning their multiplication facts.

Are all of the activities suitable for students?

Yes and no. Expand The Value and Prime Time are the most rigorous activities in MWM. Students like to do things if they can be successful. It's a good idea to hold off on those two until the end of your sessions, unless you have some students who want to tackle a challenge.





Besides MWM, what can I do to increase multiplication speed?

Keep in mind that MWM is designed to give students different ways to play and learn their multiplication facts. We want to give our students a depth of understanding with multiplication....more of the application of multiplication, rather than just performing the algorithm.

For pure speed and fun, we suggest using Math And Field (available for free download at www.PEPnonprofit.org). Math And Field is a series of events set up for students to go as fast as they can with addition, subtraction, multiplication, and division. It's the perfect next step once students have really learned multiplication.

Finally, for additional ways to have students play with multiplication you can use our Acing Math: One Deck At A Time (also available for free at www.PEPnonprofit.org). There are a number of games for students to play with a single deck of cards that focus on multiplication (Multiplication Number Battle, Multi-Digit Multiplication Number Battle, Integer Multiplication Number Battle, Reading Multiplication Minds, Multiplication Zone, Multiplication Toss Up, and I Spy Products).

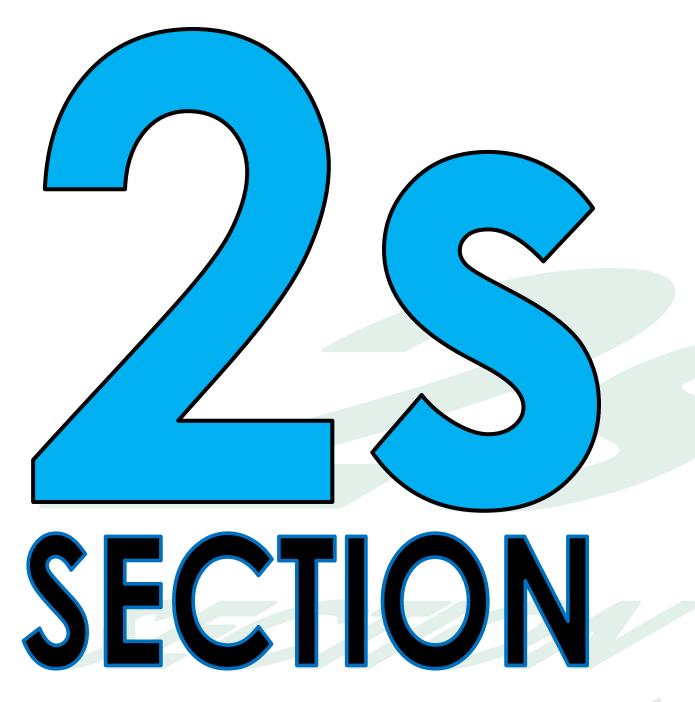
Both of the suggested activities are compliments to MWM and can be the speed piece to your multiplication program.





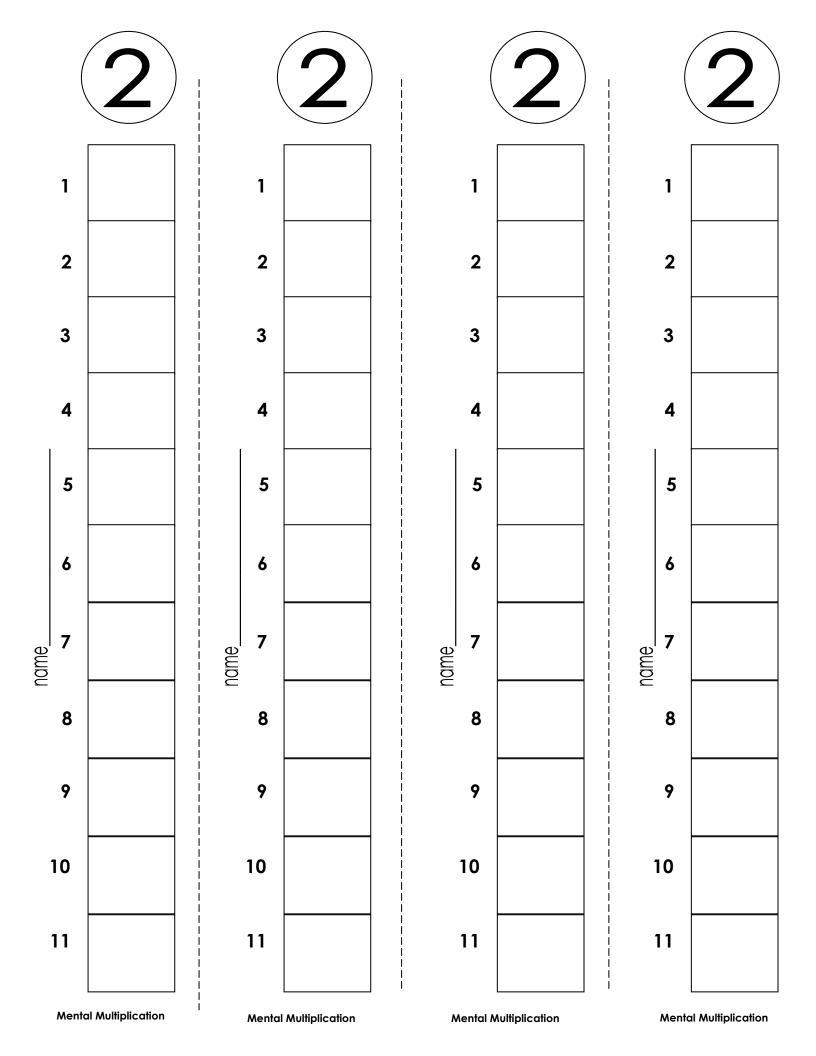
What is a breakdown of the activities?

Activity	Skill	Whole Group	Pairs or More	Individua I	Multiple Versions
Mental Multiplication	Solving In Head	Χ			
Find The Factors	Factor Families			X	
Multiplication Match	Standard and Word Form			X	Χ
Left-Right Write	Directional Reading			X	Χ
Answer- Answer-Answer	Word Problems			X	X
Stair Steps	Skip Counting			X	Χ
Talk the Talk	Verbal Repetition			X	X
52 Flip	Manipulative	X	X	X	
What Is Missing?	Pre Algebra			Χ	X
Repeat That	Repeated Addition			Χ	X
Expand The Value	Expanded Form			X	X
Prime Time	Prime Factorization			X	Χ
Put It All Together	Assessment of Multiplication	X		Χ	Χ









Fin	d	The	Fa	ct	O	rs	29

2	4	6	8	10	12
1 x 2					
2 x 1					
14	16	18	20	22	24

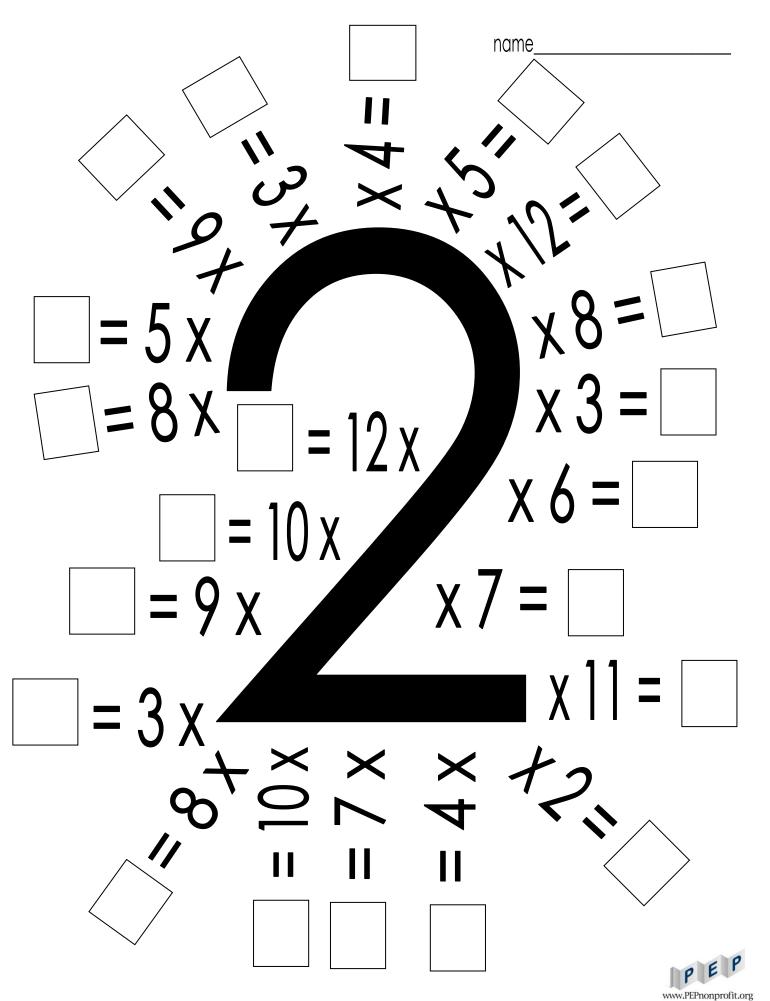


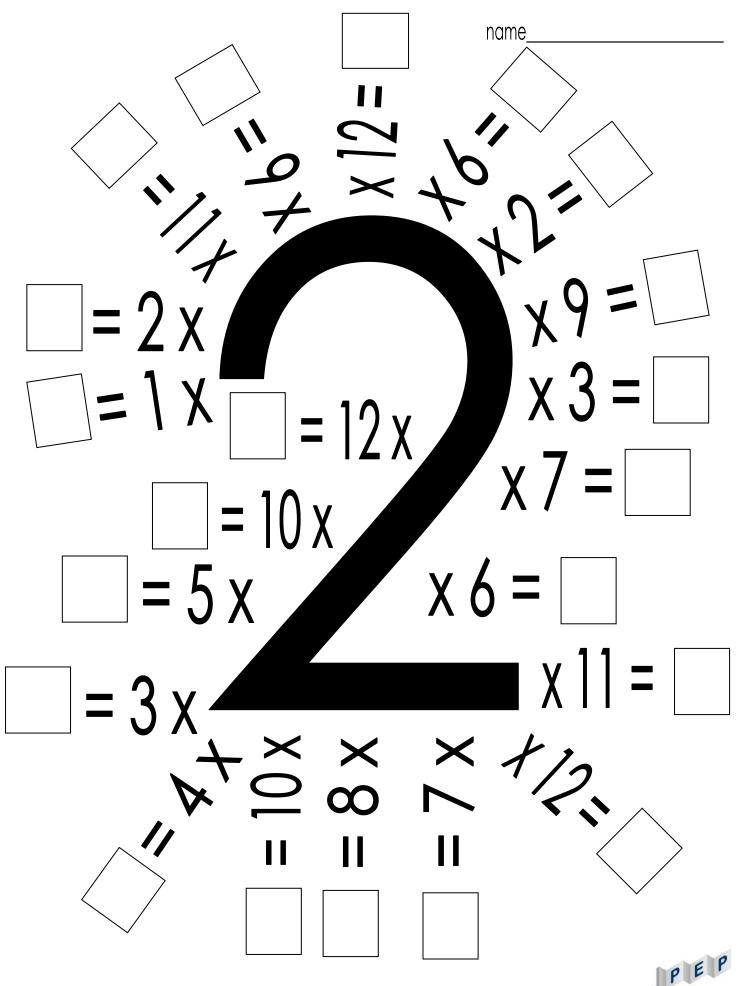
	12	2 x 2	twenty	
	20	6 x 2	ten	
	4	2 x 8	twelve	_
	8	9 x 2	four	name
_	10	1 x 2	two	ゴカ
2s version 1	16	2 x 3	six	
ver	22	10 x 2	twenty two	
2 s	2	2 x 11	sixteen	
	18	4 x 2	eighteen	
	24	2 x 12	fourteen	
	6	7 x 2	twenty four	
	14	2 x 5	eight	

Multiplication Match

	22 16	2 x 8 9 x 2	twenty two
2 ر	4 18 10	2 x 2 12 x 2 1 x 2	six four two
2s version 2	24 12 2 6	2 x 3 11 x 2 2 x 10 6 x 2	twelve twenty twenty four eighteen
	14 8 20	2 x 4 5 x 2 2 x 7	eight sixteen fourteen

Multiplication Match





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name	

			name
Word Problem?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
There are 2 eggs in each box. How many eggs are there in 4 boxes?	Complete Sentence Answer	Each candy bar costs \$2. How much would 7 candy bars cost?	Complete Sentence Answer
ITIETE IT 4 DOXES	<u>Visual Answer</u>	Carray Dars Costy	<u>Visual Answer</u>
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Jose has 2 boxes of crayons. Each box holds 12 crayons. How many crayons	Complete Sentence Answer	There are 2 marbles in each box. How many marbles are in 9	Complete Sentence Answer
does Jose have?	<u>Visual Answer</u>	boxes?	<u>Visual Answer</u>
Word Problem?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
Each child has 6 pencils. If there are 2 children, how many pencils are	Complete Sentence Answer	Kim went to the store 8 times. She bought 2 oranges each time she	Complete Sentence Answer
there in total?	<u>Visual Answer</u>	went. How many oranges did Kim	<u>Visual Answer</u>

buy in total?

			name
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Tim buys 7 bags of apples. Each bag has 2 apples. How many apples does	Complete Sentence Answer	Each child has 11 pencils. How many pencils do 2 children have?	Complete Sentence Answer
Tim have?	<u>Visual Answer</u>	Criliarennavey	<u>Visual Answer</u>
		1	
<u>Word Problem</u> ?	<u>Numeric Answer</u>	Word Problem?	Numeric Answer
Each child has 8 Skittles. If there are 2 children, how many Skittles are	Complete Sentence Answer	There are 5 cookies in each box. How many cookies are in 2 boxes?	Complete Sentence Answer
there in total?	<u>Visual Answer</u>		<u>Visual Answer</u>
<u>Word Problem</u> ?	Numeric Answer	Word Problem?	Numeric Answer
Abby has 12 bags of potatoes. If each bag has 2 potatoes, how	Complete Sentence Answer	Carl buys 3 packs of gum. Each pack of gum has 2 pieces in it. How	Complete Sentence Answer
ī l			

Visual Answer

many pieces of

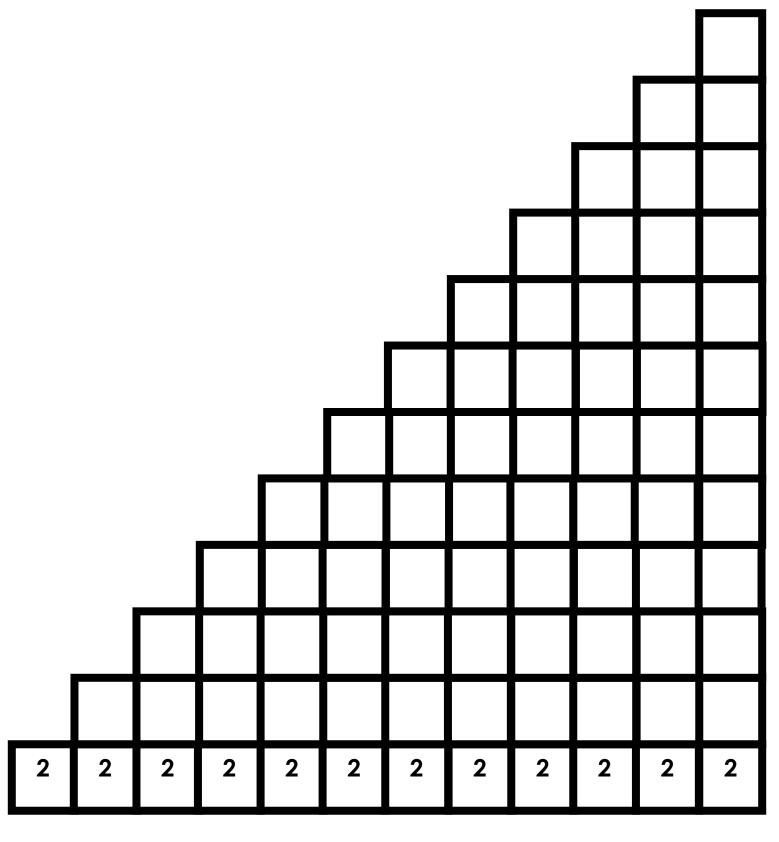
gum does Carl have?

Visual Answer

many potatoes are

there in total?

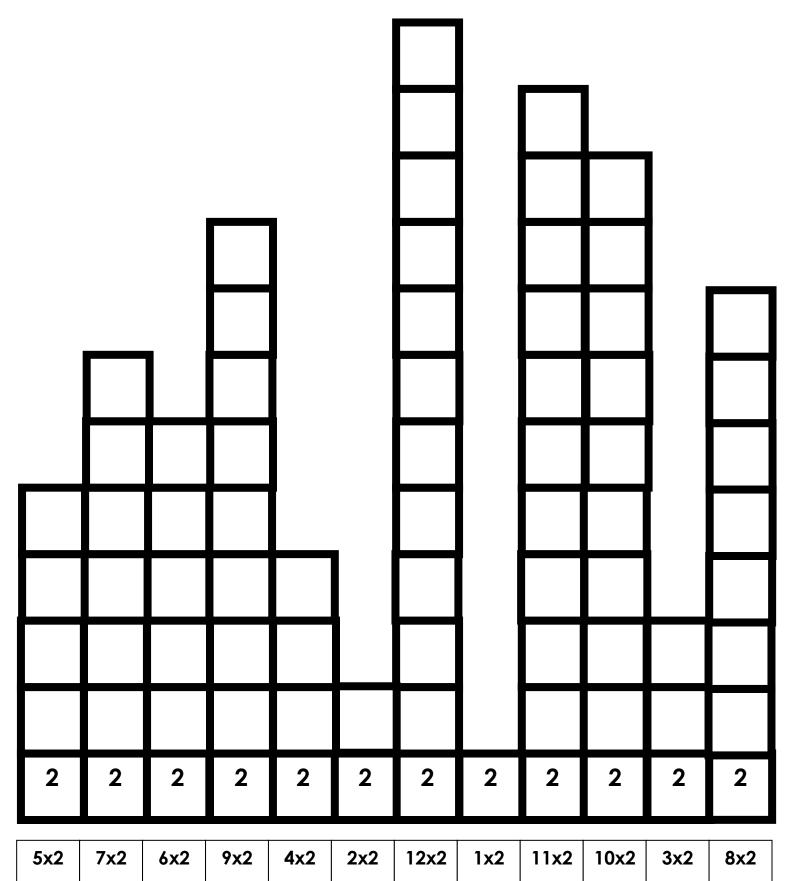
Stair Steps 2s version 1



1x2	2x2	3x2	4x2	5x2	6x2	7x2	8x2	9x2	10x2	11x2	12x2



Stair Steps 2s version 2





3 x 2 = 6 3 x 2 = 3 x 2 =	x = x =	3 3 3 x2 x2 x2 x2 x x x x
5 x 2 = 10 5 x 2 = 5 x 2 =	x = x =	5 5 5 x2 x2 x2 x x x x
7 x 2 = 14 7 x 2 = 7 x 2 =	x = x =	7 7 7 x2 x2 x2 x x x x
9 x 2 = 18 9 x 2 = 9 x 2 =	x = x =	9 9 9 <u>x2 x2 x2 x2 x x x</u>
11 x 2 = 22 11 x 2 = 11 x 2 =	x = x =	11 11 11 x2 x2 x2 x2 x x x

4 x 2 = 8 4 x 2 =	x =	4 4 4 <u>x2 x2 x2</u>	<u>x x x</u>
4 x 2 =	x =		
6 x 2 = 12 6 x 2 = 6 x 2 =	x = x =	6 6 6 <u>x2</u> <u>x2</u> <u>x2</u>	<u>x x x</u>
8 x 2 = 16 8 x 2 = 8 x 2 =	x = x =	8 8 8 <u>x2 x2 x2</u>	<u>x x x</u>
10 x 2 = 20 10 x 2 = 10 x 2 =	x = x = x =	10 10 10 x2 x2 x2	<u>x x x</u>
12 x 2 = 24 12 x 2 = 12 x 2 =	x= x=	12 12 12 <u>x2 x2 x2</u>	<u>x x x</u>

2 x 3 = 6	x =						
2 x 3 =	x =		2		V	v	V
2 x 3 =	x=	<u>xs</u>	<u>x3</u>	<u>xs</u>	<u>X_</u>	<u>X</u>	<u>x</u> _
2 x 5 = 10	x =						
2 x 5 =	x =		2				
2 x 5 =	x =	<u>X5</u>	<u>x5</u>	<u>X5</u>	<u>x</u> _	<u>X_</u>	<u>x_</u>
2 x 7 = 14	x =						
2 x 7 =	x =		2	2			
		<u>x7</u>	<u>x7</u>	<u>x7</u>	<u>X</u> _	<u>X</u>	<u>X</u>

2 x 4 = 8	x =						
2 x 4 =	x=		2	2 <u>x4</u>			
2 x 4 =	x=	<u>x4</u>	<u>X4</u>	<u>X4</u>	<u>X</u>	<u>X</u>	<u>X</u> _

2 x 12 = 24	x =		
2 x 12 =	x =	2 2 2 <u>x12 x12 x12</u>	
2 x 12 =	x =	<u> </u>	<u> </u>

52	Fl	ip
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Jack=10	Queen=11	King=12	Ace=I		
Multiply By 2					

START		
		FINISH

Place Deck Here		

Place X Cards Here	



name_____

2 x = 4

3 x 2 =

x 5 = 10

2 x 8 =

12 x 2 =

x 2 = 18

2 x = 14

2 x 10 =

2 x = 4

4 x 2 =

2 x 3 =

2 x = 18

6 x 2 =

2 x 8 =

2

x 8



9

X

18

x 2

14

5 x 2



2 x = 6

8 x 2 =

x 12 = 24

2 x 8 =

12 x 2 =

2 x = 14

2 x 10 =

9 x = 18

4 x 2 =

2 x 3 =

2 x = 18

6 x 2 =

2 x 11 =

2

<u>x 11</u>

9

 $\frac{x}{14}$

2

x 6







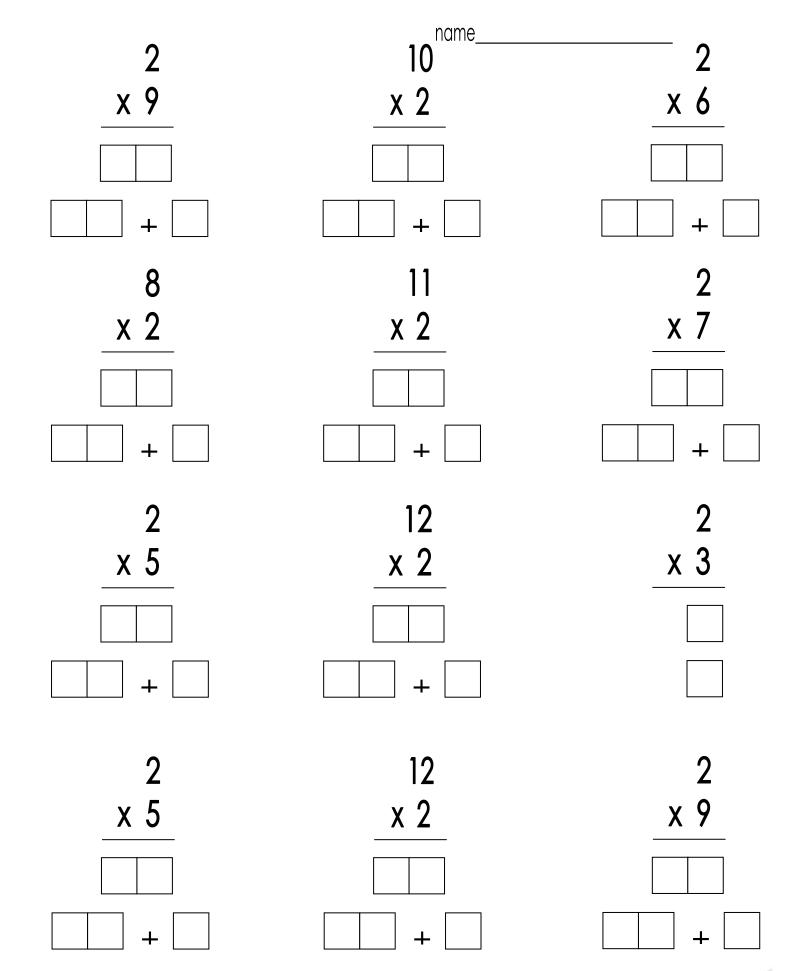
Multiplication Sentence	Repeated Addition Sentence
5 x 2 = 10	2 + 2 + 2 + 2 + 2 = 10
2 x 8 =	
2 x 4 =	
7 x 2 =	
2 x 11 =	
9 x 2 =	
3 x 2 =	
2 x 12 =	
2 x 10 =	

Repeat That? 2s version 1

name____

Multiplication Sentence	Repeated Addition Sentence
2 x 9 = 18	9 + 9 = 18
2 x 7 =	
4 x 2 =	
2 x 12 =	
6 x 2 =	
5 x 2 =	
2 x 10 =	
2 x 9 =	
7 x 2 =	

	name	
2	12	2
<u>x 8</u>	<u>x 2</u>	<u>x 7</u>
+	+	+
8	10	2
<u>x 2</u>	_x 2	_x 6
+	+	+
2	11	2
x 5	<u>x 2</u>	<u>x 4</u>
+	+	
2	12	2
x 6	<u>x 2</u>	_x 8



2 x 6 5 x 2			3 x 2	2 x 5		8 x 2	
	8						
6	2 x 7	16	5 x 2	2 x 2	1 x 2	6 x 2	18
2 x 4 20		18	7 x 2	10	6	14	2 x 9
6	2 x 7	16	5 x 2	2 x 2	1 x 2	6 x 2	18
2 x 3		2 x 8	5 x 2				2 x 4

name	

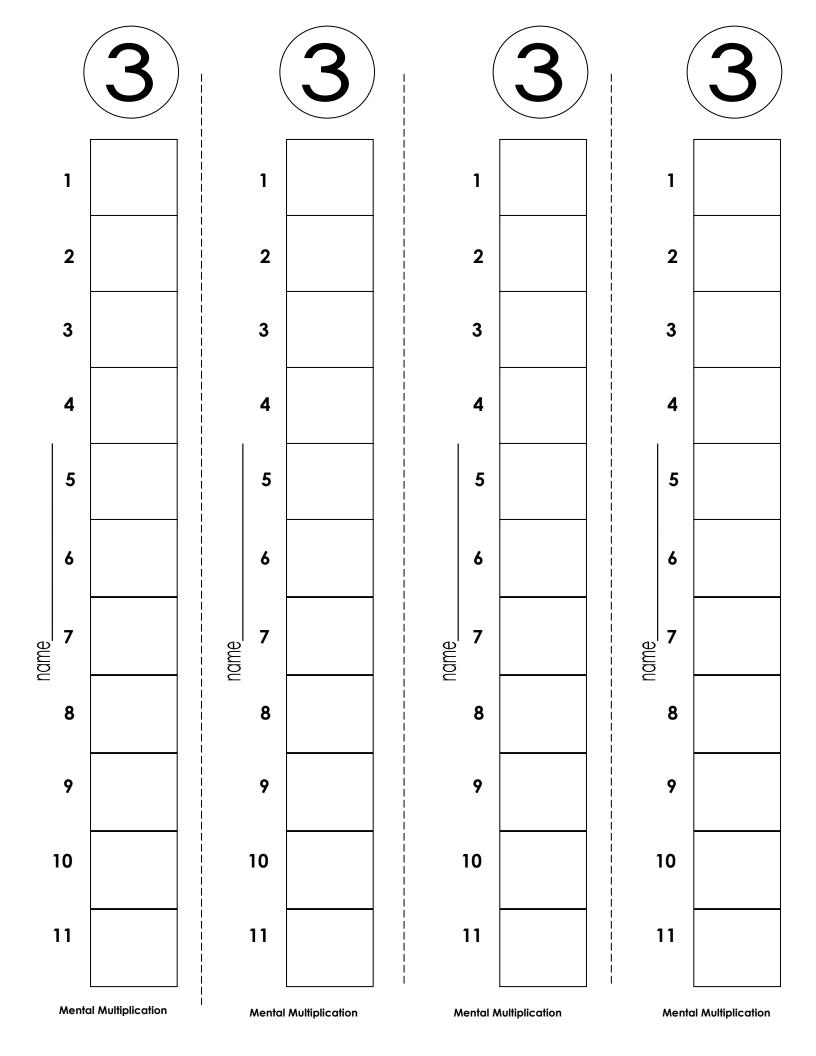
2 x 2 6 x 2	3 x 2	2 x 7	8 x 2
		6	
	9 x 2 14	2 x 1 9 x 2	7 x 2
2 x 9	10 11 x 2	20 16	2 x 8 14
12 x 2 2 x 8 16	12	2 x 8 7 x 2	6 x 2 18
2 x 3	2 x 8 5 x 2		2 x 9

5 x 2 2 x 2	6 x 2	2 x 4	8 x 2
	8 12	6	
11 x 2	2 x 10 5 x 2	2 x 7 9 x 2	6 x 2
2 x 9	11 x 2		2 x 4
	6 10		
12 x 2	2 x 5 8 x 2	2 x 8 4 x 2	
			<u>16</u> <u>10</u>
2 x 3	2 x 4 5 x 2		2 x 3
14	16	24 20	8









Find The Factors 3s

3	6	9	12	15	18
1 x 3					
<u>3 x 1</u>					
21	24	27	30	33	36

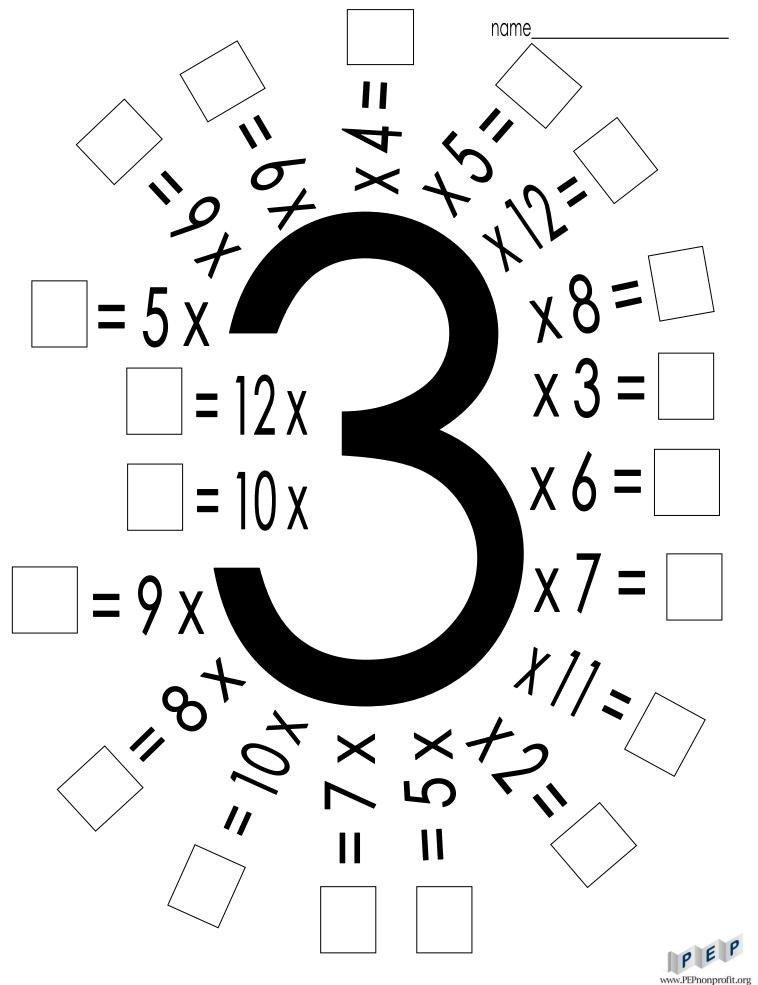
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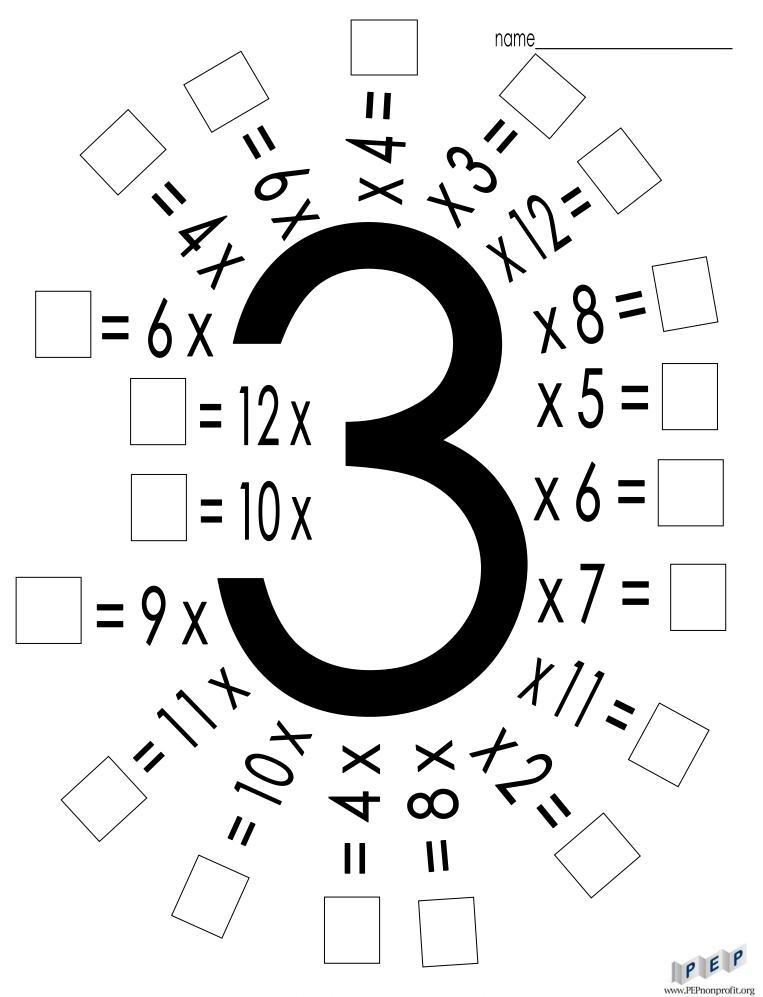
				_
	18	2 x 3	three	
	30	6 x 3	nine	
	6	3 x 8	fifteen	Ļ
	12	9 x 3	twenty one	<u>name</u>
_	15	1 x 3	twenty seven	ne
3s version	24	3 x 3	thirty three	
ver	33	10 x 3	thirty six	
38	3	3 x 11	thirty	
	27	4 x 3	twenty four	
	36	3 x 12	eighteen	
	9	7 x 3	twelve	
	21	3 x 5	six	

Multiplication Match

	36	3 x 8	thirty three
	3	9 x 3	fifteen
	33	2 x 3	nine
	6	12 x 3	six
	30	1 x 3	throp
7	9	3 x 3	eighteen
3s version 2	27	11 x 3	thirty
S <	12	3 x 10	thirty six
κ̈́	24	6 x 3	twenty seven
	15	3 x 4	twelve
	21	5 x 3	twenty four
	18	3 x 7	twenty one
			·

Multiplication Match





Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
There are 3 toys in each box. How many toys are there in 3 boxes?	Complete Sentence Answer	Each video game costs \$3. How much would 7 video games cost?	Complete Sentence Answer
THEIC III 3 DOXES?	<u>Visual Answer</u>	viaco garries cosi e	<u>Visual Answer</u>
		1	
<u>Word Problem</u> ?	<u>Numeric Answer</u>	Word Problem?	Numeric Answer
Ed has 3 boxes of crayons. Each box holds 10 crayons. How many crayons	Complete Sentence Answer	There are 3 lollipops in each bag. How many lollipops are in 12	Complete Sentence Answer
does Ed have?	<u>Visual Answer</u>	bags?	<u>Visual Answer</u>
Word Problem?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
Each student has 6 books. If there are 3 students, how many books are	Complete Sentence Answer	Tara went to the movies 5 times. She bought 3 sodas each time she	Complete Sentence Answer
there in total?	<u>Visual Answer</u>	went. How many sodas did Tara buy	<u>Visual Answer</u>

in total?

Word Problem?	<u>Numeric Answer</u>
Dave buys 4 bags of pineapples. Each bag has 3 pineapples. How	Complete Sentence Answer
many pineapples does Dave have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each child has 11 pencils. How many pencils do 3 children have?	Complete Sentence Answer
	<u>Visual Answer</u>

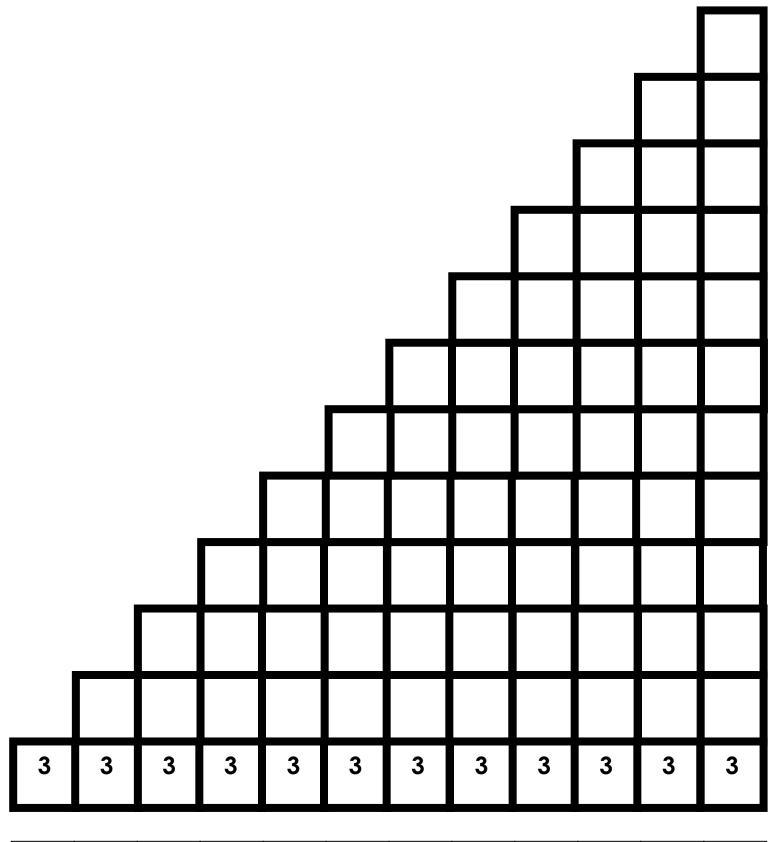
<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each boy has 8 baseball cards. If there are 3 boys, how many	Complete Sentence Answer
baseball cards are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
There are 12 cookies in each box. How many cookies are in 3	Complete Sentence Answer
boxes?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Nola has 9 boxes of bracelets. If each box has 3 bracelets, how	Complete Sentence Answer
many bracelets are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Wendy buys 3 packs of gum. Each pack of gum has 5 pieces in it.	Complete Sentence Answer
How many pieces of gum does Wendy have?	<u>Visual Answer</u>

Stair Steps 3s version 1



1x3 2x3 3x3 4x3 5x3 6x3 7x3 8x3 9x3 10x3 11	3 12x3	11x3	10x3	9x3	8x3	7x3	6x3	5x3	4x3	3x3	2x3	1x3	
---	----------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	--



name	

S	tair Ste	ps 3s ve	ersion 2	!						•	
								5 			Ц
3	3	3	3	3	3	3	3	3	3	3	3
5x3	7x3	6x3	9x3	4x3	2x3	12x3	1x3	11x3	10x3	3x3	8x3



3 x 3 = 9 3 x 3 = 3 x 3 =	x = x =	3 3 3 <u>x3 x3 x3 x x x x</u>
5 x 3 = 15 5 x 3 = 5 x 3 =	x = x =	5 5 5 <u>x3 x3 x3 x3 x x x x</u>
7 x 3 = 21 7 x 3 = 7 x 3 =	x = x =	7 7 7 <u>x3 x3 x3 x3 x x x x</u>
9 x 3 = 27 9 x 3 = 9 x 3 =	x = x =	9 9 9 <u>x3 x3 x3 x x x x</u>
	x_= x_=	11 11 11 <u>x3</u> <u>x3</u> <u>x3</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>

4 x 3 = 12 4 x 3 = 4 x 3 =	x = x =	4 4 4 <u>x3 x3 x3</u>	<u>X X X</u>
6 x 3 = 18 6 x 3 = 6 x 3 =	x = x =	6 6 6 <u>x3</u> <u>x3</u> <u>x3</u>	<u>x x x</u>
8 x 3 = 24 8 x 3 = 8 x 3 =	x = x = x =	8 8 8 <u>x3 x3 x3</u>	<u>x x x</u>
10 x 3 = 30 10 x 3 = 10 x 3 =	x = x =	10 10 10 <u>x3 x3 x3</u>	<u>x x x</u>
12 x 3 = 36 12 x 3 = 12 x 3 =	x = x =	12 12 12 _x3 x3 x3	<u>x x x</u>



nama

3 x 3 = 9	x =						
3 x 3 =	x=		3				
3 x 3 =	x=	<u>x3</u>	<u>x3</u>	<u>x3</u>	<u> </u>	<u>X_</u>	<u>X_</u>
3 x 5 = 15	x=						
3 x 5 =	x =		3				
3 x 5 =	x=	<u>x5</u>	<u>x5</u>	<u>x5</u>	<u>X</u>	<u>X</u> _	<u>x</u>
3 x 7 = 21	x =						
$3 \times 7 = 21$ $3 \times 7 =$	x =		3			· ·	Y
				3 <u>x7</u>	<u>×</u> _	<u>x</u> _	<u>x</u> _
3 x 7 =	x =				<u>x</u> _	<u>X</u> _	<u>X</u>
3 x 7 =	x =				<u>x</u> _	<u>x</u> _	<u>x</u> _
3 x 7 = 3 x 7 =	x =		<u>x7</u>	<u>x7</u>	<u>x</u> _	<u>X</u> _	<u>X</u> _
$3 \times 7 =$ $3 \times 7 =$ $3 \times 9 = 27$	x = x =	<u>x7</u>	<u>x7</u>	<u>x7</u> 3		<u>x</u> _	

$$\begin{vmatrix}
3 \times 11 = 33 & x = \\
3 \times 11 = & x = \\
3 \times 11 = & x = \\
x = & x$$

		name					
3 x 4 = 12 3 x 4 = 3 x 4 =	x = x =	3 <u>x4</u>	3 <u>x4</u>	3 <u>x4</u>	<u>x_</u>	<u>x</u> _	<u>x_</u>
$3 \times 6 = 18$ $3 \times 6 =$ $3 \times 6 =$	x = x =		3 <u>x6</u>	3 <u>x6</u>	<u>X_</u>	<u>X</u> _	<u>x</u> _
3 x 8 = 24 3 x 8 = 3 x 8 =	x = x =		3 <u>x8</u>	3 <u>x8</u>	<u>x</u> _	<u>x</u> _	<u>x</u> _
3 x 10 = 30 3 x 10 = 3 x 10 =	x = x =		3 <u>x10</u>		<u>X_</u>	<u>x</u> _	<u>x</u> _
3 x 12 = 36 3 x 12 = 3 x 12 =	x = x =		3 x12		<u>x_</u>	<u>x</u> _	<u>x</u> _

Jack=10	Queen=11	King=12	Ace=1		
Multiply By 3					

START		
		FINISH

Place Deck Here

Place X Cards Here



name_____

3 x = 6

3 x 3 =

x 5 = 15

3 x 8 =

12 x 3 =

x 3 = 27

3 x = 21

3 x 10 =

3 x = 6

4 x 3 =

x 11 = 33

3 x 3 =

3 x = 27

6 x 3 =

3 x 8 =

3

x 8



9

X

27



 $\frac{\times 3}{21}$

5 x 3



3 x = 9

8 x 3 =

3 x 8 =

12 x 3 =

 $3 \times \square = 2$

3 x 10 =

9 x = 27

4 x 3 =

3 x 3 =

3 x = 27

6 x 3 =

x 7 = 21

3 x 11 =

3

x 11



9

X

2/

 $\frac{x}{21}$

3

x 6







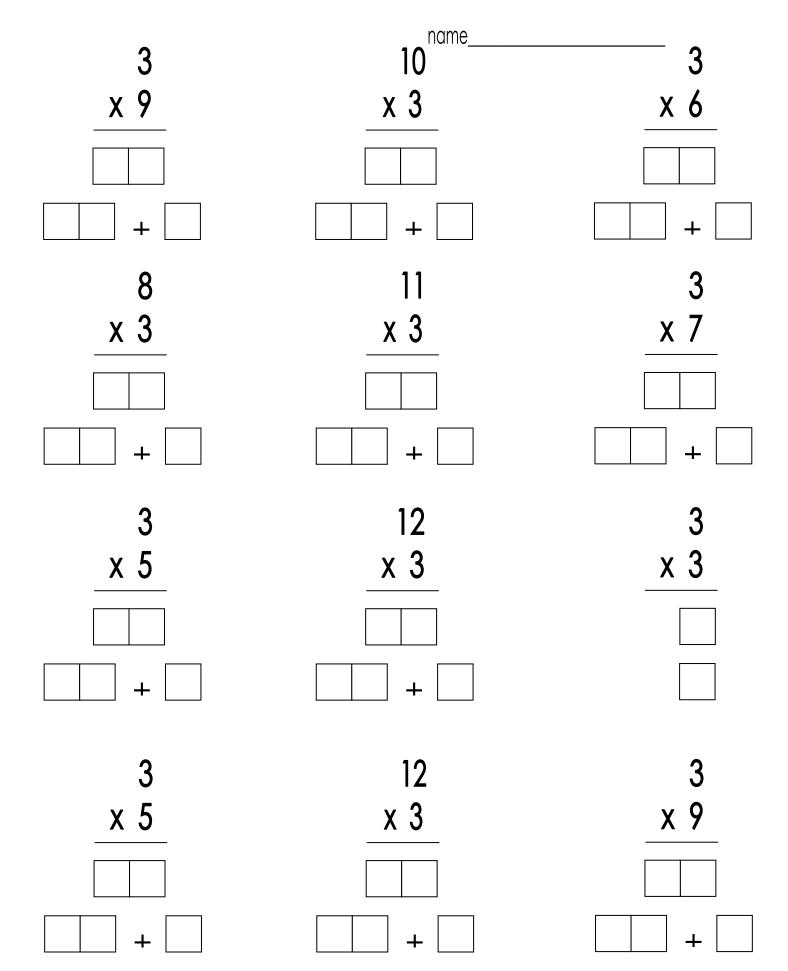
Multiplication Sentence	Repeated Addition Sentence		
5 x 3 = 15	3 + 3 + 3 + 3 + 3 = 15		
3 x 9 =			
3 x 8 =			
7 x 3 =			
3 x 11 =			
9 x 3 =			
3 x 3 =			
3 x 12 =			
3 x 10 =			

Repeat That? 3s version 1

name_____

Multiplication Sentence	Repeated Addition Sentence		
3 x 9 = 27	9 + 9 + 9 = 27		
3 x 7 =			
4 x 3 =			
3 x 12 =			
6 x 3 =			
5 x 3 =			
3 x 10 =			
3 x 9 =			
7 x 3 =			

name_ x 8 x 3 x 7 8 10 x 3 x 3 x 6 x 5 x 3 x 4 12 x 8 x 3 x 6



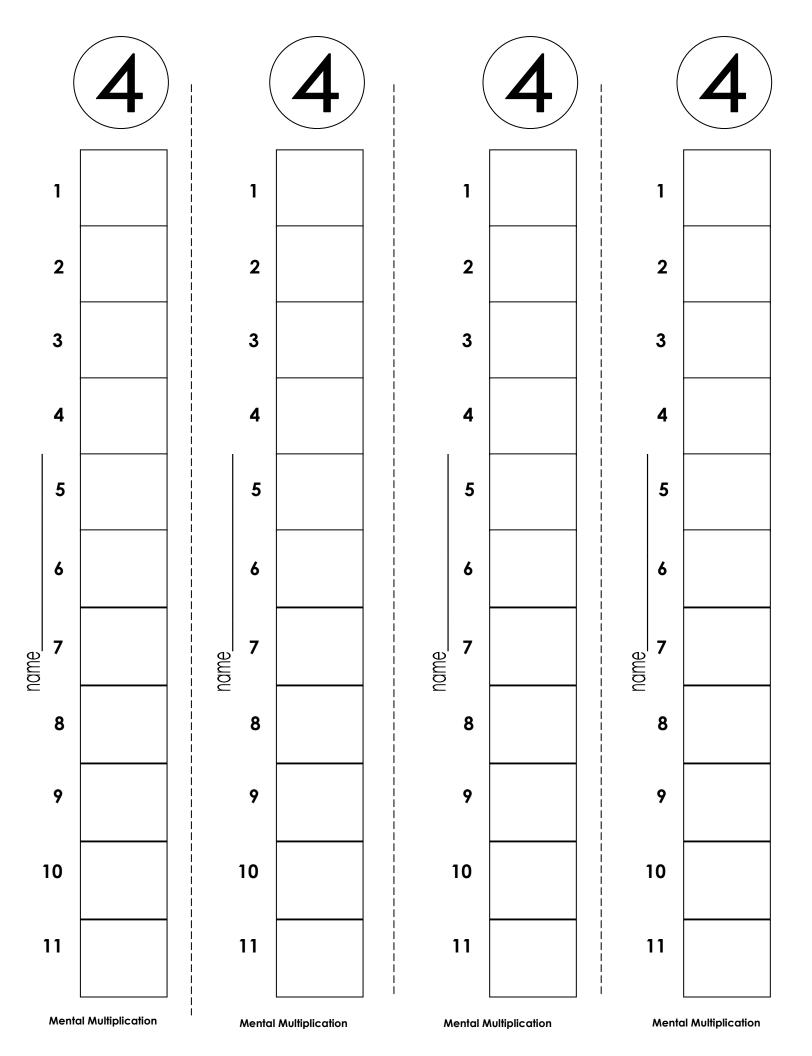
name

name	
2 x 3	
33	
11 x 3	
3 27 33	
3 x 9 11 x 3 3 x 8	
<u>12</u> <u>24</u> <u>30</u> <u>33</u> <u>15</u> <u>12</u>	
12 x 3	
<u></u>	
2 x 3	
12 30 24 30 33	

SECTION







Find The Factors 4s

Find the raciors 4s								
4	8	12	16	20	24			
1 x 4								
4 x 1								
2 x 2								
28	32	36	40	44	48			
					<u></u>			
			nam					

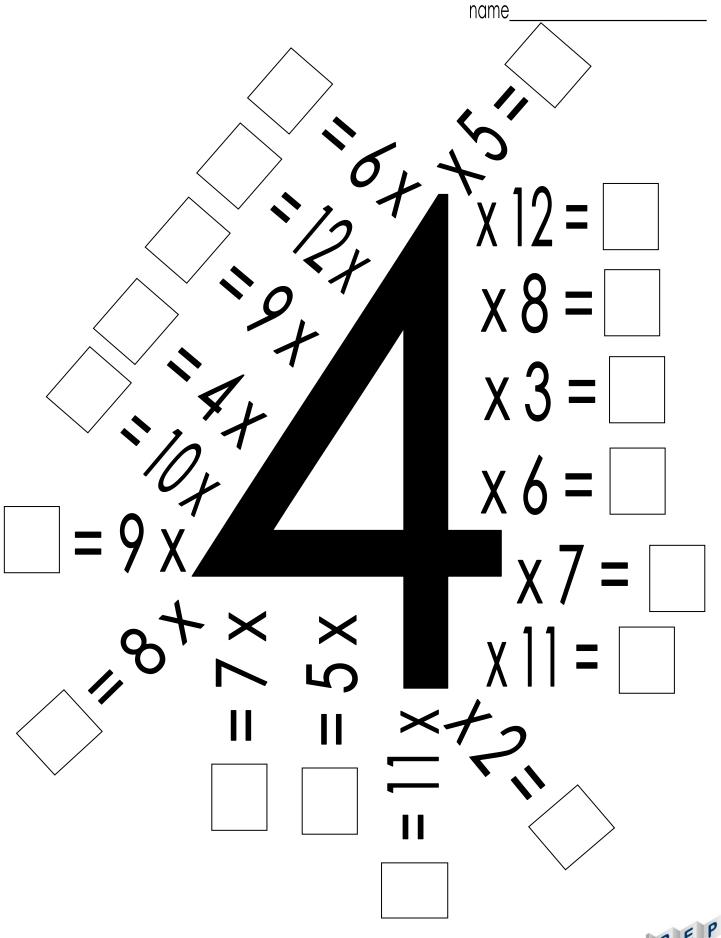


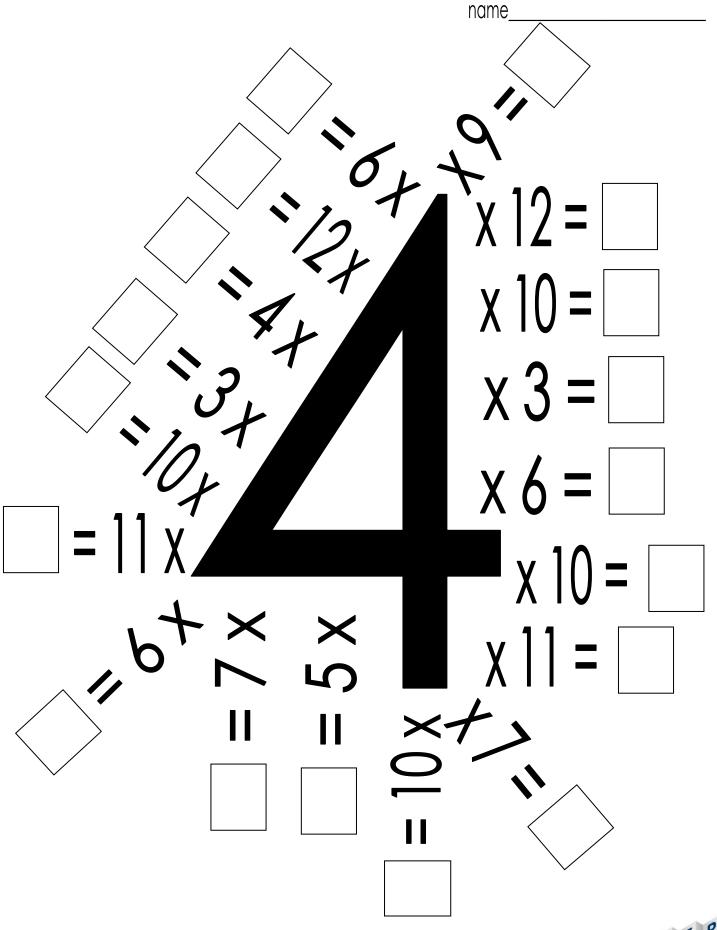
				_
	24	2 x 4	four	
	40	6 x 4	twelve	
	8	4 x 8	twenty	Ļ
	12	9 x 4	twenty eight	name
1 ر	20	1 x 4	thirty six	9
4s version 1	32	3 x 4	forty four	
ver	48	10 x 4	forty eight	
45	4	4 x 11	forty	
	36	4 x 4	twenty four	
	44	4 x 12	thirty two	
	16	7 x 4	sixteen	
	28	4 x 5	eight	

Multiplication Match

	48	4 x 8	forty four
	4	9 x 4	twenty
	44	2 x 4	twelve
	8	12 x 4	eight
7	40	1 x 4	four O
4s version 2	12	3 x 4	twenty four
	36	11 x 4	forty
	16	4 x 10	forty eight
	32	6 x 4	thirty six
	20	4 x 4	sixteen
	28	5 x 4	thirty two
	24	4 x 7	twenty eight
			·

Multiplication Match





Word Problem? There are 7 apples in each bag. How many apples are there in 4 bags?	Numeric Answer Complete Sentence Answer Visual Answer	Word Problem? Each hot dog costs \$2. How much would 4 hot dogs cost?	Numeric Answer Complete Sentence Answer Visual Answer
Word Problem?	Numeric Answer	Word Problem [?]	Numeric Answer
Ryan has 4 boxes of baseball cards. Each box holds 8	Complete Sentence Answer	There are 4 stickers on a page. How many stickers are	Complete Sentence Answer
baseball cards. How many baseball cards does Ryan have?	<u>Visual Answer</u>	there on 12 pages?	<u>Visual Answer</u>
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Each student has 9 folders. If there are 4 students, how many folders are	Complete Sentence Answer	Lana went to the library 4 times. She checked out 10 books each time she	Complete Sentence Answer
there in total?	<u>Visual Answer</u>	went. How many books did Lana check out in total?	<u>Visual Answer</u>

name				

Word Problem?	<u>Numeric Answer</u>
Chris buys 7 bags of oranges. Each bag has 4 oranges. How many oranges	Complete Sentence Answer
does Chris have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each child has 8 flowers. How many flowers do 4 children have?	Complete Sentence Answer
Children Havey	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Each girl has 12 stuffed animals. If there are 4 girls, how many stuffed	Complete Sentence Answer
animals are there in total?	<u>Visual Answer</u>

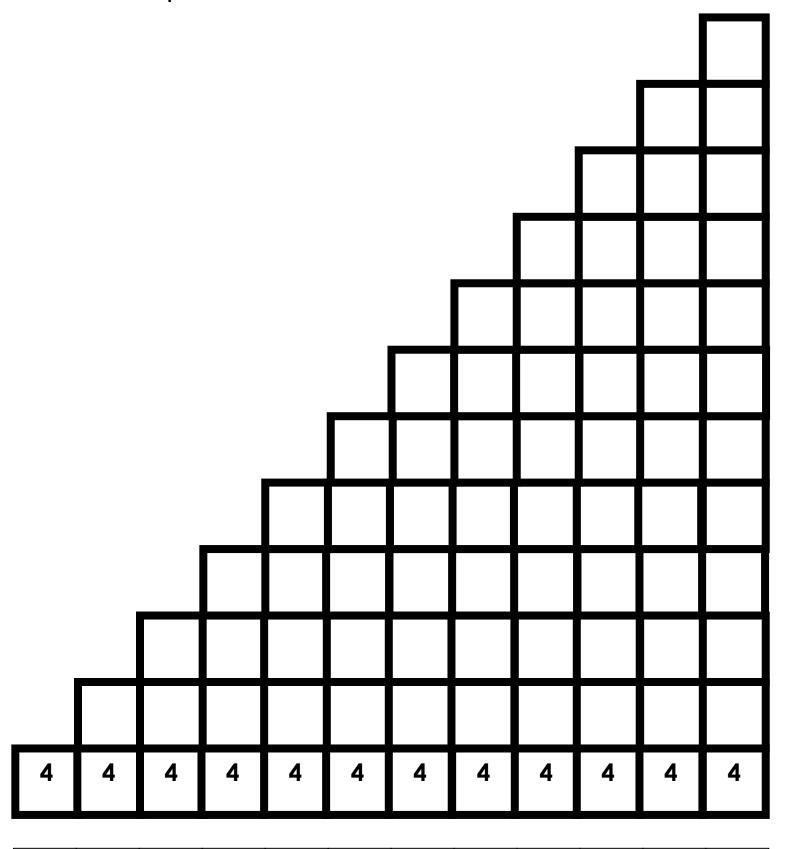
Numeric Answer	<u>Word Problem</u> ?
Complete Sentence Answer	There are 9 candy
	canes in each box.
	How many candy
	canes are in 4
<u>Visual Answer</u>	boxes?

Word Problem?	<u>Numeric Answer</u>
Hannah has 4 boxes of erasers. If each box has 4 erasers, how many	Complete Sentence Answer
erasers are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Miguel buys 4 packs of gum. Each pack of gum	Complete Sentence Answer
has 5 pieces in it. How many pieces of gum does Miguel have?	<u>Visual Answer</u>



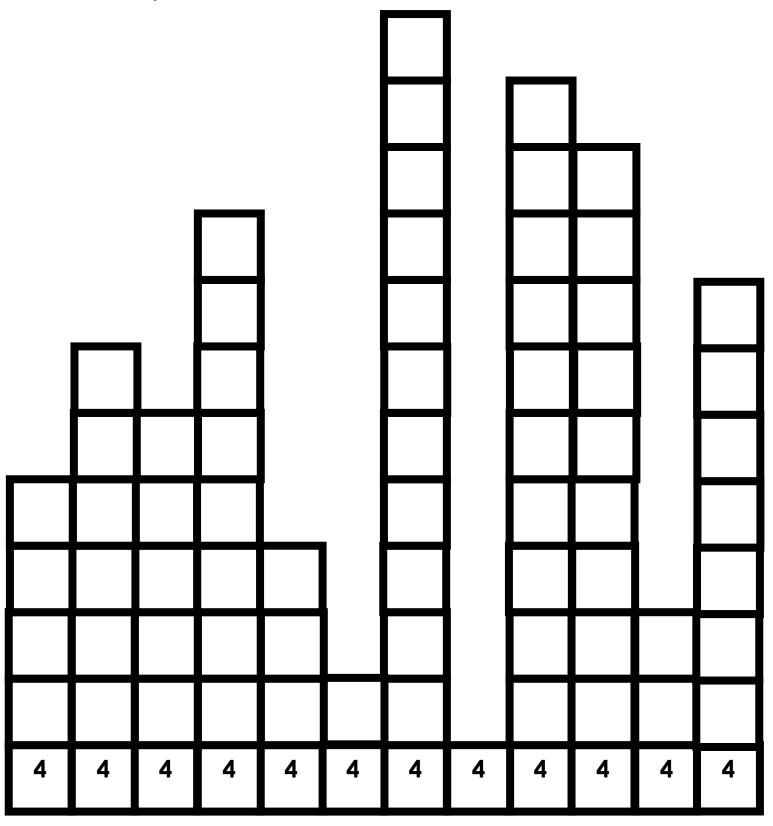
Stair Steps 4s version 1



1x4	2x4	3x4	4x4	5x4	6x4	7x4	8x4	9x4	10x4	11x4	12x4
					I	1					1



Stair Steps 4s version 2



5x4	7x4	6x4	9x4	4x4	2x4	12x4	1x4	11x4	10x4	3x4	8x4



3 x 4 = 12 3 x 4 = 3 x 4 =	x =	3 3 3 <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>
5 x 4 = 20 5 x 4 = 5 x 4 =	x = x = x =	5 5 5 <u>x4 x4 x4 x x x x</u>
7 x 4 = 28 7 x 4 = 7 x 4 =	x = x =	7 7 7 <u>x4 x4 x4</u> <u>x x x x</u>
9 x 4 = 36 9 x 4 = 9 x 4 =	x = x =	9 9 9 <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>
11 x 4 = 44 11 x 4 = 11 x 4 =	x = x =	11 11 11 <u>x4</u> <u>x4</u> <u>x4</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>

4 x 4 = 16 4 x 4 = 4 x 4 =	x = x =	4 4 4 <u>x4 x4 x4 x4 x x x x</u>
6 x 4 = 24 6 x 4 = 6 x 4 =	x = x =	6 6 6 <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>
8 x 4 = 32 8 x 4 = 8 x 4 =	x = x =	8 8 8 <u>x4 x4 x4</u> <u>x x x x</u>
10 x 4 = 40 10 x 4 = 10 x 4 =	x= x=	10 10 10 <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u> <u>x4</u>
12 x 4 = 36 12 x 4 = 12 x 4 =	x= x=	12 12 12 _x4 x4 x4 x x4 x x x x

4 x 3 = 12 4 x 3 = 4 x 3 =	x = x =	4 4 4 x3 x3 x3 x3 x x x x
4 x 5 = 20	x=	
4 x 5 =	x =	4 4 4
4 x 5 =	x =	<u>x5 x5 x5 x x x x x</u>
4 x 7 = 28	x =	
4 x 7 =	x =	
4 x 7 =	x =	<u>x7 x7 x7 x x x x </u>
4 0 0/		
4 x 9 = 36	x=	
4 x 9 =	x=	4 4 4
4 x 9 =	x =	<u>x9 x9 x9 x x x x</u>
4 11 44		
4 x 11 = 44	x_=	
4 x 11 =	x=	4 4 4 4 x x x x
4 x 11 =	x =	$\left \begin{array}{cccccccccccccccccccccccccccccccccccc$

		nume	
4 x 4 = 16 4 x 4 = 4 x 4 =	x = x =	4 4 4 <u>x4 x4 x4 x x x x</u>	<u>C</u>
4 x 6 = 24 4 x 6 = 4 x 6 =	x = x =	4 4 4 <u>x6</u> <u>x6</u> <u>x6</u> <u>x6</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>	<u><</u>
4 x 8 = 32 4 x 8 = 4 x 8 =	x = x =	4 4 4 <u>x8</u> <u>x8</u> <u>x8</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>	<u>(</u>
4 x 10 = 40 4 x 10 = 4 x 10 =	x = x =	4 4 4 x10 x10 x10 x x x x	<u>(</u>
4 x 12 = 48 4 x 12 = 4 x 12 =	x= x=	4 4 4 x12 x12 x12 x x x	<u>C</u>

name			
IMITIO			

Jack=10	Queen=11	King=12	Ace=1
	Multiply	By 4	

START		
		FINISH

Place Deck Here		

	Place X Cards Here
l	



name_____

4 x = 8

$$x 5 = 20$$

$$x 4 = 36$$

$$4 \times 3 =$$

$$x 11 = 44$$

$$x 5 = 20$$



9



$$\frac{\times 4}{28}$$

$$x 12 = 48$$

$$x 4 = 36$$

$$3 \times 4 =$$



9

36



 $\frac{\mathsf{x}\ \mathsf{4}}{\mathsf{28}}$

4

x 6





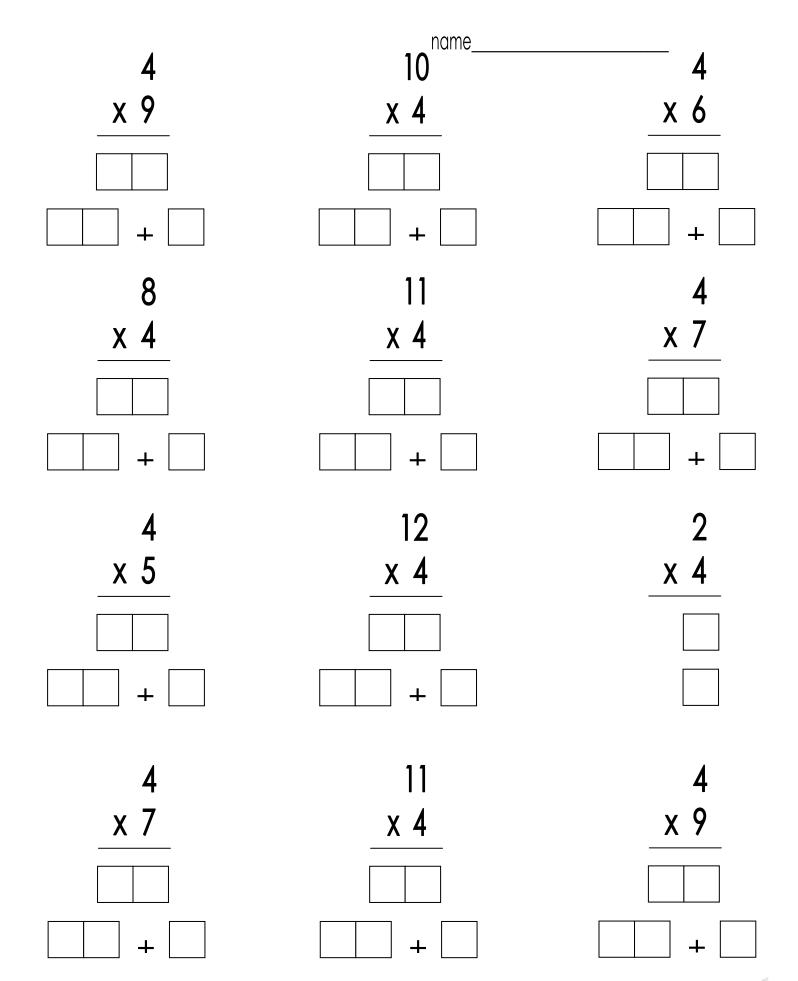


Multiplication Sentence	Repeated Addition Sentence
4 x 3 = 12	3+3+3+3 = 12
4 x 9 =	
4 x 8 =	
7 x 4 =	
4 x 11 =	
9 x 4 =	
3 x 4 =	
4 x 12 =	
4 x 10 =	

Repeat That? 4s version 1

Multiplication Sentence	Repeated Addition Sentence
4 x 9 = 36	9 +9 + 9 + 9 = 36
4 x 7 =	
4 x 4 =	
4 x 12 =	
6 x 4 =	
5 x 4 =	
4 x 10 =	
4 x 9 =	
7 x 4 =	

name_ x 8 x 4 x 7 8 10 x 4 x 6 x 4 x 5 x 4 x 4 12 x 8 x 6 **x** 4



name	_
------	---

3 x 4 4 x 8 5 x 4

name	
_	

2 x 4	6 x 4 4	24	4 x 2 4 x 7	8	8 x 4	40
4	11 x 4 4 x 12		9 x 4 4 x 1	9 x 4	7 x 4	48
4 x 9			11 x 4 4 44	16	12	4 x 8
24	12 x 4 4 x 8	12	4 x 3 4 x 8	7 x 4	6 x 4	24
2 x 4		4 x 8	5 x 4			4 x 9

44 ____

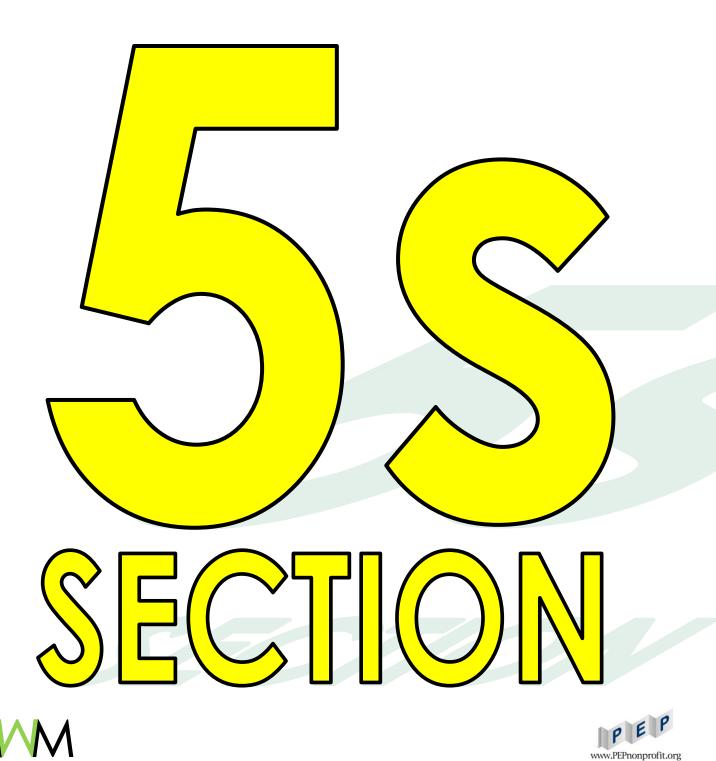
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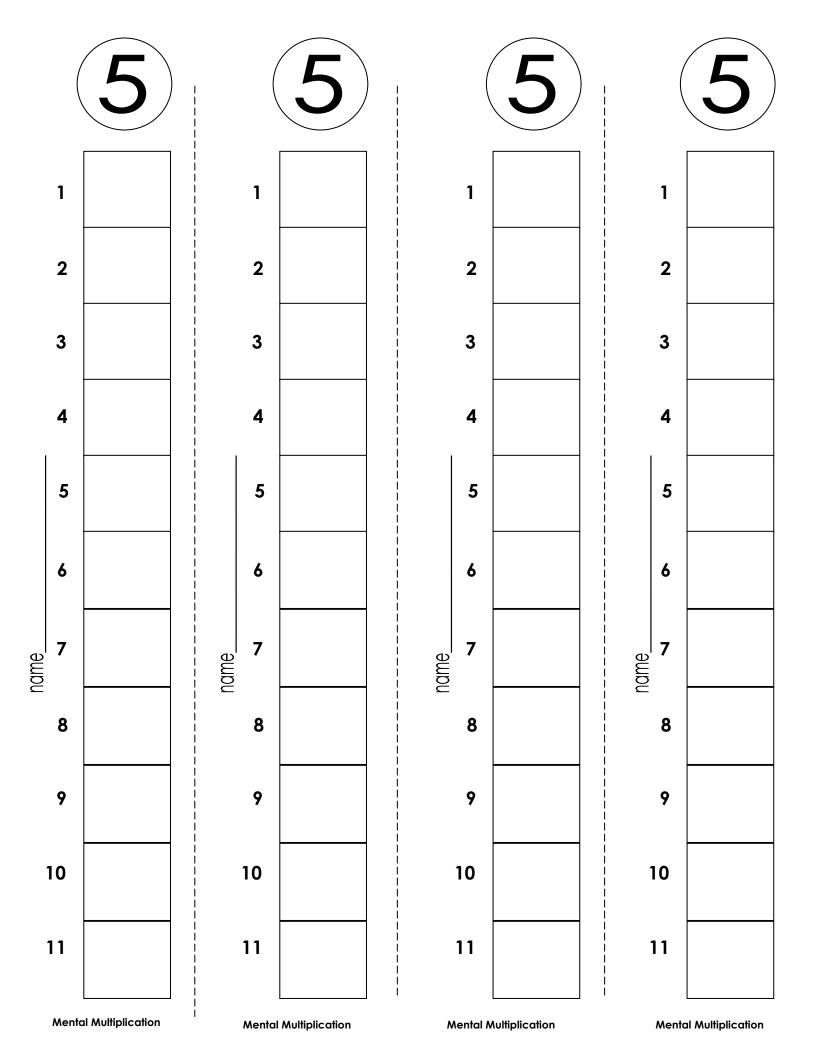
24

36

name			

5 x 4 1 x 4		6 x 4 3 x 4 4 4	8 x 4
11 x 4 12	4 x 10 24	5 x 4	6 x 4 32
4 x 9		11 x 4	12
12 x 4 32	4 x 5 28	8 x 4 3 x 4 4 x 2	
2 x 4	3 x 4	5 x 4	3 x 4





Fin	d	The	F	act	loi	rs	59

			1 4 5 1 5 1 5 1		
5	10	15	20	25	30
1 x 5					
<u>5 x 1</u>					
0.5	40		50	5.5	40
35	40	45	50	55	60

name_



				_
	30	2 x 5	five	
	50	6 x 5	fifteen	
	10	5 x 8	twenty five	\rfloor_{\supset}
	15	9 x 5	thirty five	<u>name</u>
n 1	25	1 x 5	forty five	e e
5s version 1	40	3 x 5	fifty five	
\ \ \	60	10 x 5	sixty	
58	5	5 x 11	fifty	
	45	4 x 5	thirty	
	55	5 x 12	forty	
	20	7 x 5	twenty	
	35	5 x 5	ten	

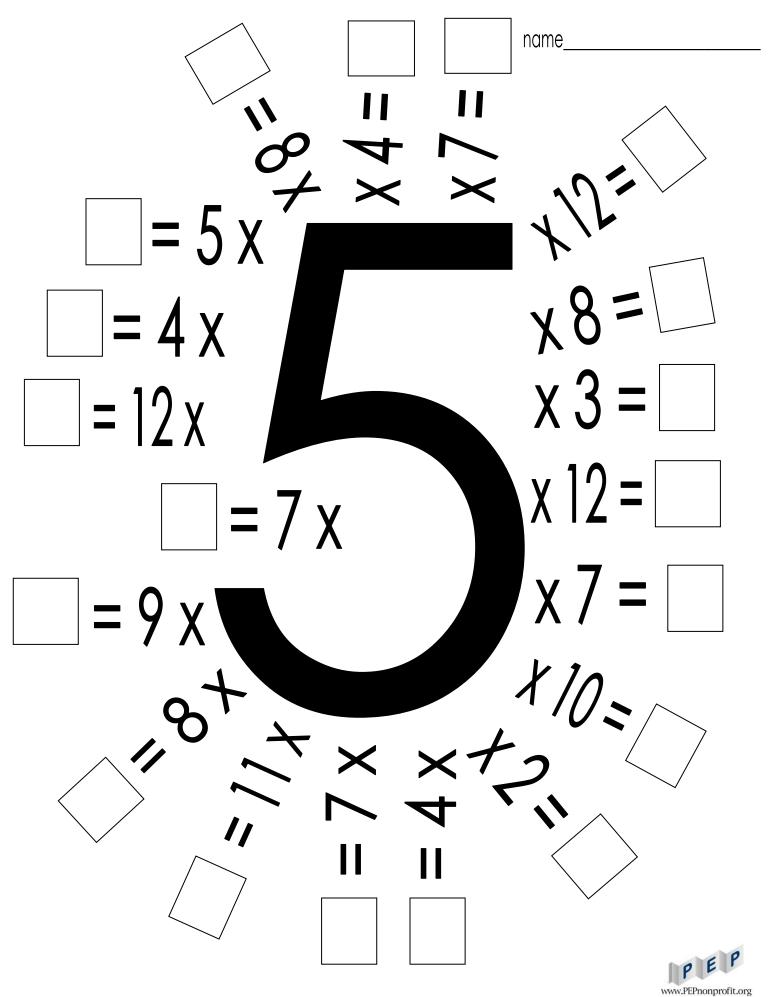
Multiplication Match

	60	5 x 8	fifty five
	5	9 x 5	twenty five
	55	2 x 5	fifteen
	10	12 x 5	ten
2	50	1 x 5	five
O	15	3 x 5	thirty
ersi	45	11 x 5	fifty
5s version 2	20	5 x 10	sixty
4,	40	6 x 5	forty five
	25	4 x 5	twenty
	35	5 x 5	forty
	30	5 x 7	thirty five

Multiplication Match

name =5x=5x $= 12 \chi$ x 6 == 10 xPEP

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Word Problem?	<u>Numeric Answer</u>
There are 5 peaches in each bag. How many peaches are there	Complete Sentence Answer
in 4 bags?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each book costs \$5. How much would 5 books cost?	Complete Sentence Answer
	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Lucy has 9 packs of gum. Each pack holds 5 pieces of gum. How many	Complete Sentence Answer
pieces of gum does Lucy have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 8 donuts in a box. How many donuts are there in 5 boxes?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each student has 5 books. If there are 12 students, how many books are there in total?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Eric read 5 books. Each book has 10 pages. How many pages did Eric read?	Complete Sentence Answer
	<u>Visual Answer</u>



name_			
_	 	 	 _

Word Problem ?	<u>Numeric Answer</u>
Becky buys 7 boxes of cookies. Each box has 5 cookies. How many cookies	Complete Sentence Answer
does Becky have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each child has 8 markers. How many markers do 5 children have?	Complete Sentence Answer
	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Each boy has 12 toy cars. If there are 5 boys, how many toy cars are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

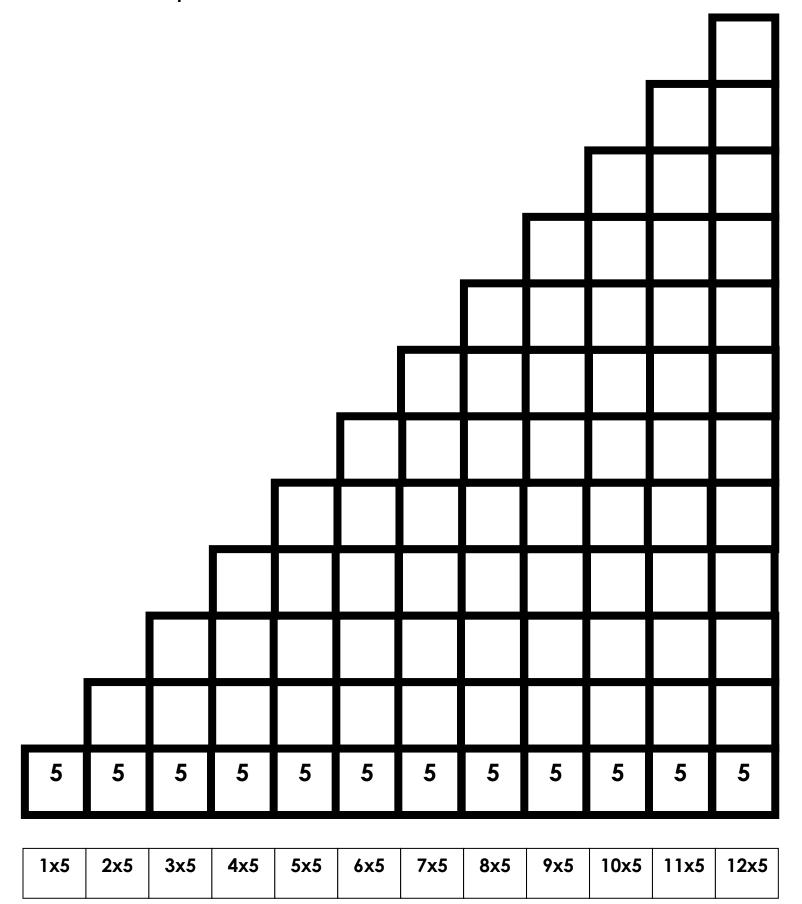
<u>Word Problem</u> ?	Numeric Answer
There are 5 chocolates in each box. How many chocolates are in 9 boxes?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Gwyneth has 5 boxes of chalk. If each box has 6 pieces of chalk,	Complete Sentence Answer
how many pieces are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Alie buys 11 packs of gum. Each	Complete Sentence Answer
pack of gum has 5 pieces in it. How	
many pieces of	<u>Visual Answer</u>
gum does Allie have?	

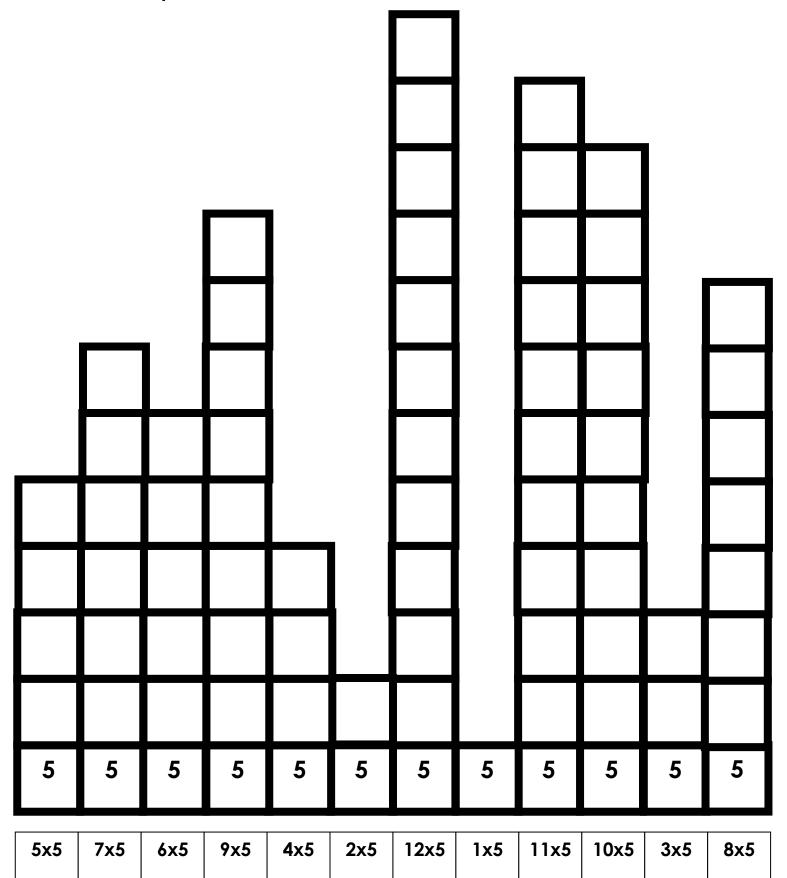


Stair Steps 5s version 1





Stair Steps 5s version 2





$3 \times 5 = 15$ $3 \times 5 =$ $3 \times 5 =$	x = x =	3 3 3 x5 x5 x5 x5 x x x x
5 x 5 = 25 5 x 5 = 5 x 5 =	x = x =	5 5 5 <u>x5 x5 x5</u> <u>x x x x</u>
7 x 5 = 35 7 x 5 = 7 x 5 =	x = x =	7 7 7 <u>x5 x5 x5 x x x x</u>
9 x 5 = 45 9 x 5 = 9 x 5 =	x= x=	9 9 9 <u>x5 x5 x5</u> <u>x x x x</u>
11 x 5 = 55 11 x 5 = 11 x 5 =	x = x =	11 11 11 <u>x5</u> <u>x5</u> <u>x5</u> <u>x5</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>

4 x 5 = 20 4 x 5 = 4 x 5 =	x = x =	4 4 4 <u>x5 x5</u> <u>x5</u>	<u>x x x</u>
6 x 5 = 30	x =		
6 x 5 =	x =	6 6 6	
6 x 5 =	x =	<u>x5</u> <u>x5</u> <u>x5</u>	<u>X X X</u>
8 x 5 = 40	V -		
	x=		
8 x 5 =	x =	8 8 8 <u>x5 x5 x5</u>	<u>x x x</u>
8 x 5 =	x =	<u> </u>	
10 x 5 = 50	x =		
10 x 5 =	x =	10 10 10	
10 x 5 =	x =	<u>x5 x5 x5</u>	<u>x x x</u>
12 x 5 = 60	x=		
12 x 5 =	_x_=	12 12 12	v v v
12 x 5 =	x=	<u>x5</u> <u>x5</u> <u>x5</u>	<u>X X X</u>

nama

5 x 3 = 15	x =	
5 x 3 =	x =	
5 x 3 =	x=	<u>x3</u> <u>x3</u> <u>x3</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>
5 x 5 = 25	x =	
5 x 5 =	x=	5 5 5
5 x 5 =	x=	<u>x5 x5 x5 x x x x</u>
5 x 7 = 35	x=	
5 x 7 =		5 5 5
5 x 7 =		<u>x7 x7 x7 x x x x x</u>
3 % / -	_^	
F 0 45		
$5 \times 9 = 45$	x_=	
5 x 9 =	x=	5 5 5 x9 x9 x9 x x x x
5 x 9 =	x=	
5 x 11 = 55	x =	
5 x 11 =	x =	5 5 5
5 x 11 =	x =	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

	I	name					
5 x 4 = 20 5 x 4 = 5 x 4 =	x = x =		5 <u>x4</u>	5 <u>x4</u>	<u>x_</u>	<u>x</u> _	<u>x_</u>
5 x 6 = 30 5 x 6 = 5 x 6 =	x = x =		5 <u>x6</u>	5 <u>x6</u>	<u>X_</u>	<u>X</u> _	<u>x</u> _
5 x 8 = 40 5 x 8 = 5 x 8 =	x = x =	l	5 <u>x8</u>		<u>X_</u>	<u>x</u> _	<u>x</u> _
5 x 10 = 50 5 x 10 = 5 x 10 =	x = x =	l	5 x10		<u>X_</u>	<u>x</u> _	<u>x</u> _
5 x 12 = 60 5 x 12 = 5 x 12 =	x = x =		5 <u>x12</u>		<u>x_</u>	<u>x_</u>	<u>x_</u>



name			

Jack=10	Queen=11	King=12	Ace=1	
Multiply By 5				

START		
		FINISH

Place Deck Here

Place X Cards Here



name_____

5 x = 10

$$x 5 = 45$$

$$x 11 = 55$$

$$3 \times 5 =$$

$$x 5 = 25$$



9

45



$$\frac{x \cdot 5}{35}$$

5



5	X		=	15
8	Χ	5	=	

$$x 12 = 60$$

$$x 5 = 45$$

$$3 \times 5 =$$

$$x 7 = 35$$



9

45



 $\frac{\mathsf{x} \; \mathsf{5}}{\mathsf{35}}$

5

x 6





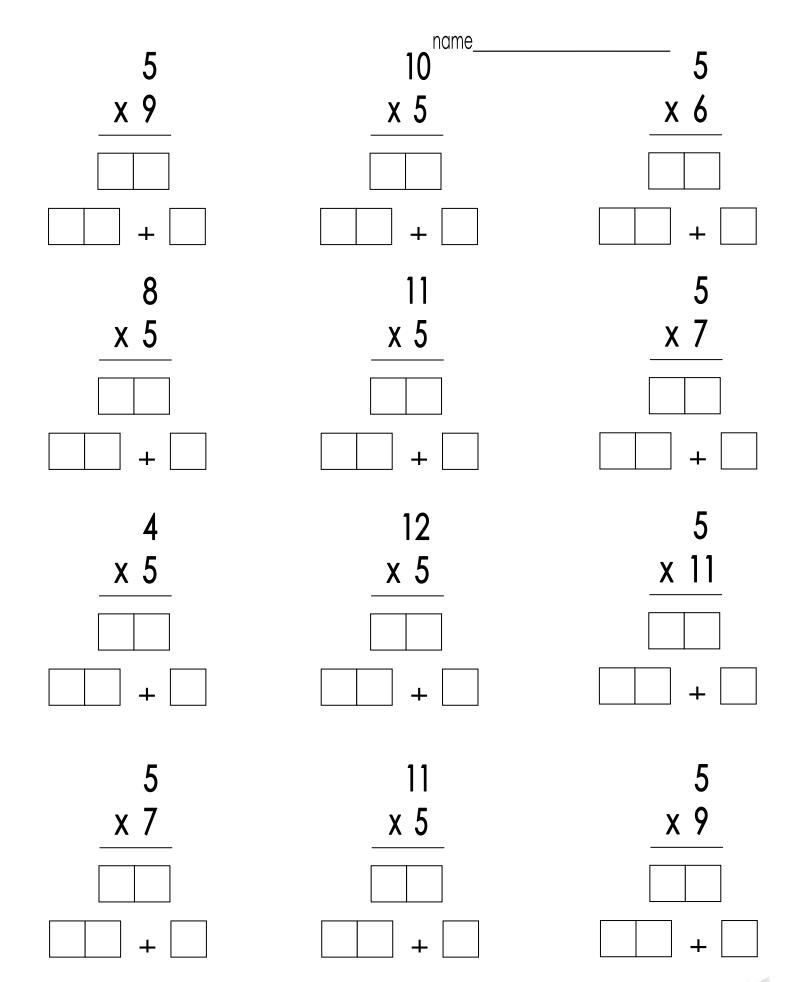


Multiplication Sentence	Repeated Addition Sentence
4 x 5 = 20	5 + 5 + 5 + 5 = 20
5 x 9 =	
5 x 8 =	
7 x 5 =	
5 x 11 =	
9 x 5 =	
3 x 5 =	
5 x 12 =	
5 x 10 =	

Repeat That? 5s version 1

Multiplication Sentence	Repeated Addition Sentence
5 x 9 = 45	9 + 9 + 9 + 9 + 9 = 45
5 x 7 =	
4 x 5 =	
5 x 12 =	
6 x 5 =	
5 x 5 =	
5 x 10 =	
5 x 9 =	
7 x 5 =	

	name	
5	12	5
_x 8	<u>x 5</u>	<u>x 7</u>
+	+	+
8	10	5
x 5	_ x 5	_x 6
+	+	+
5	11	4
x 5	<u>x 5</u>	<u>x 5</u>
+	+	+
5	12	5
x 6	x 5	x 8
+	+	+



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name			

_____5 40 _____30 45 55

5 x 9

5 x 4	1 x 5			6 x 5 3 x 5		8 x 5	
		20	15		5		35

11 x 5 5 x 10 5 x 7 5 x 4 6 x 5

15 35 40

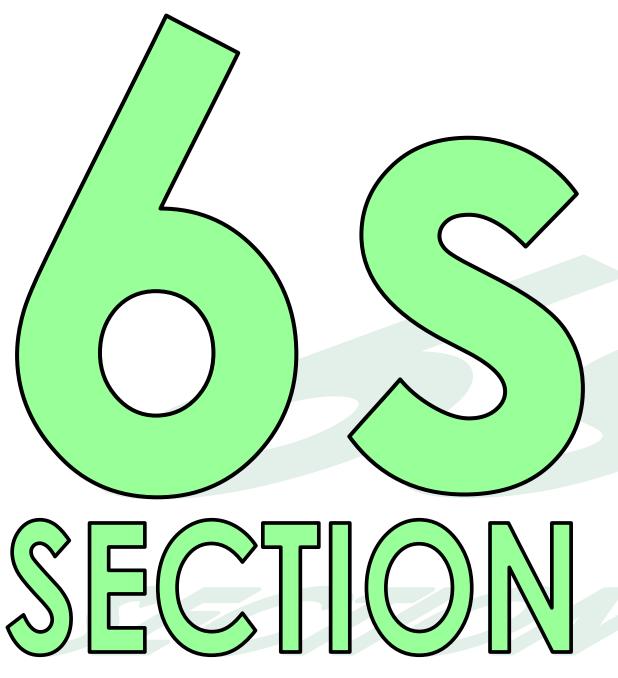
11 x 5 5 x 9 4 x 5

15 10 60 25 20 50

12 x 5 8 x 5 4 x 5 3×5 5 x 2

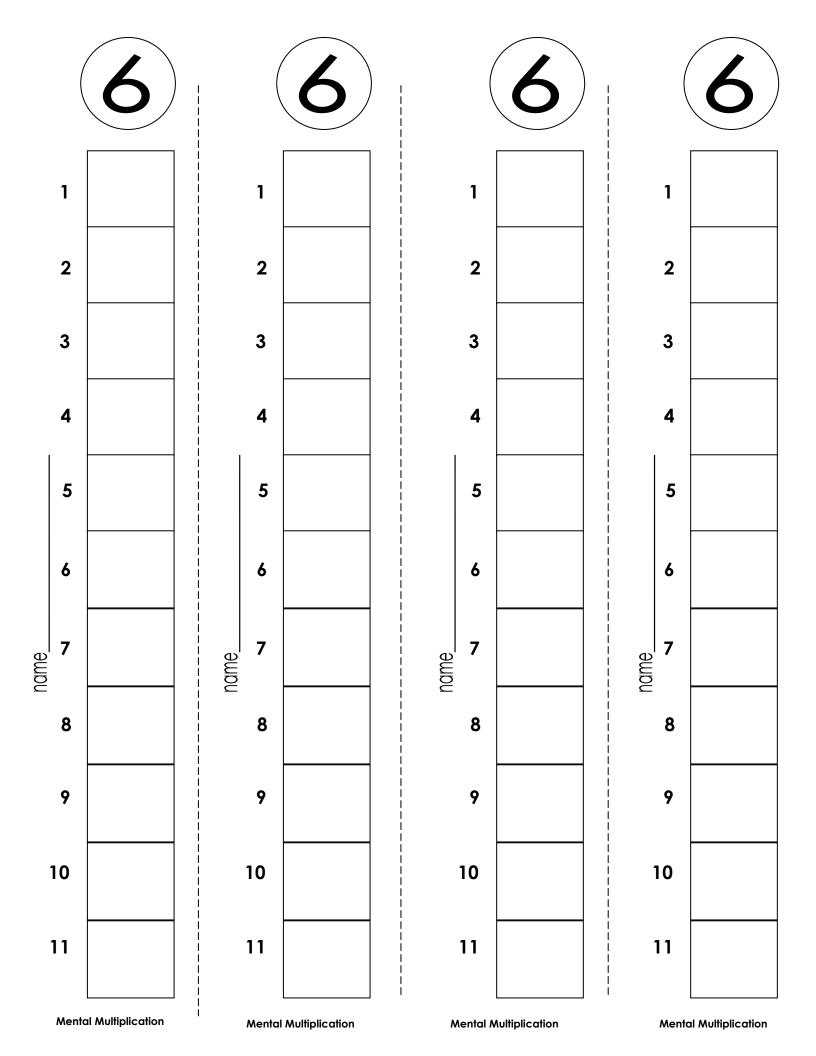
40 25 60 55

2 x 5 3 x 5 5 x 4 3×5









Find The Factors 6s					
6	12	18	24	30	36
1 x 6					
<u>6 x 1</u>					
2 x 3					
3 x 2					
42	48	54	60	66	72
;					
······		·····:		···········	
	i		nan	ne	
PEP				-	

· <u>.....</u>



	36	2 x 6	twelve	
	24	6 x 6	eighteen	
	12	6 x 8	thirty	
	18	9 x 6	thirty six	name
	30	1 x 6	sixty	ne
6s version 1	54	3 x 6	fifty four	
Ver	60	10 x 6	sixty six	
6 S	6	6 x 11	six	
	42	4 x 6	twenty four	
	48	6 x 12	forty two	
	66	7 x 6	forty eight	
	72	5 x 6	seventy two	

Multiplication Match

	48	6 x 8	sixty six
1.2	6 66 12 60	9 x 6 2 x 6 12 x 6 1 x 6	thirty eighteen twelve six
6s version 2	18 54 24 42	3 x 6 11 x 6 6 x 10 6 x 6	seventy two sixty twenty four thirty six
	30 36 72	4 x 6 5 x 6 6 x 7	forty two fifty four forty eight

Multiplication Match

name_

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name_

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Word Problem?	Numeric Answer
There are 6 sodas in each package. How many sodas are there in 7	Complete Sentence Answer
packages?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each t-shirt costs \$12. How much would 6 - shirts cost?	Complete Sentence Answer
	<u>Visual Answer</u>

Word Problem?	Numeric Answer
Lars has 10 packs of gum. Each pack holds 6 pieces. How many	Complete Sentence Answer
pieces of gum does Lars have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
There are 8 bracelets in a box. How many bracelets are there	Complete Sentence Answer
in 6 boxes?	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Each boy has 6 baseball bats. If there are 9 boys, how many	Complete Sentence Answer
baseball bats are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Jenny read 6 books. Each book has 11 pages. How many pages did Jenny	Complete Sentence Answer
read?	<u>Visual Answer</u>



name			

name
Numeric Answer
Complete Sentence Answer
<u>Visual Answer</u>
Numeric Answer
Complete Sentence Answer
<u> </u>

Visual Answer

<u>Word Problem</u> १	<u>Numeric Answer</u>
There are 6 mints in each box. How many mints are in 9 boxes?	Complete Sentence Answer
Sexes.	<u>Visual Answer</u>

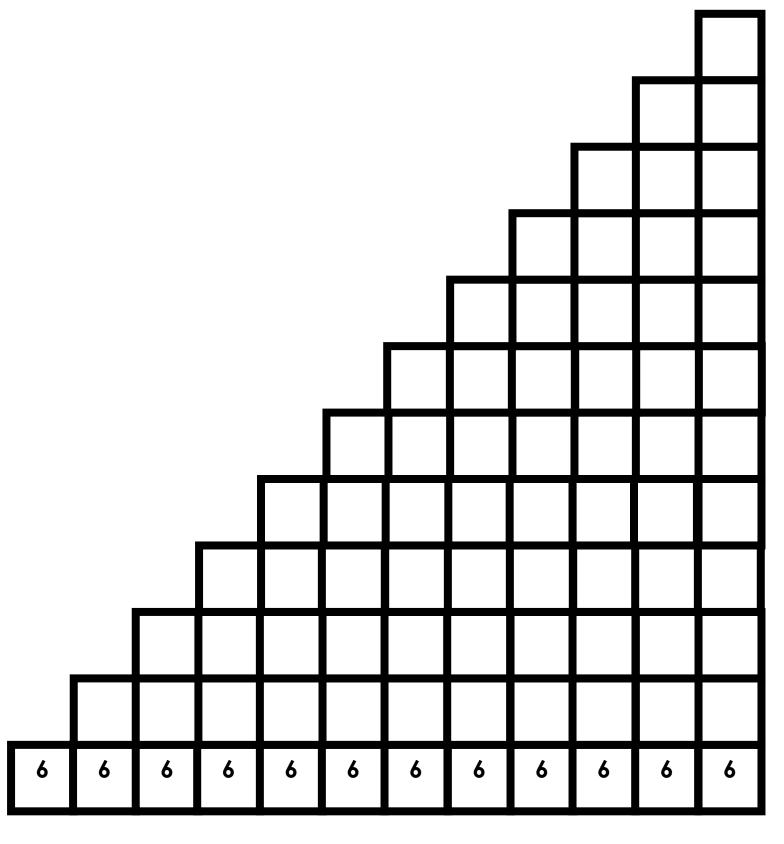
Word Problem?	<u>Numeric Answer</u>
James has 4 boxes of markers. If each box has 6 markers, how many markers	Complete Sentence Answer
are there in total?	<u>Visual Answer</u>

ribbons are there in total?

Word Problem ?	<u>Numeric Answer</u>
Stu buys 11 packs of stamps. Each	Complete Sentence Answer
pack has 6 stamps	
in it. How many	
stamps does Stu	<u>Visual Answer</u>
have?	



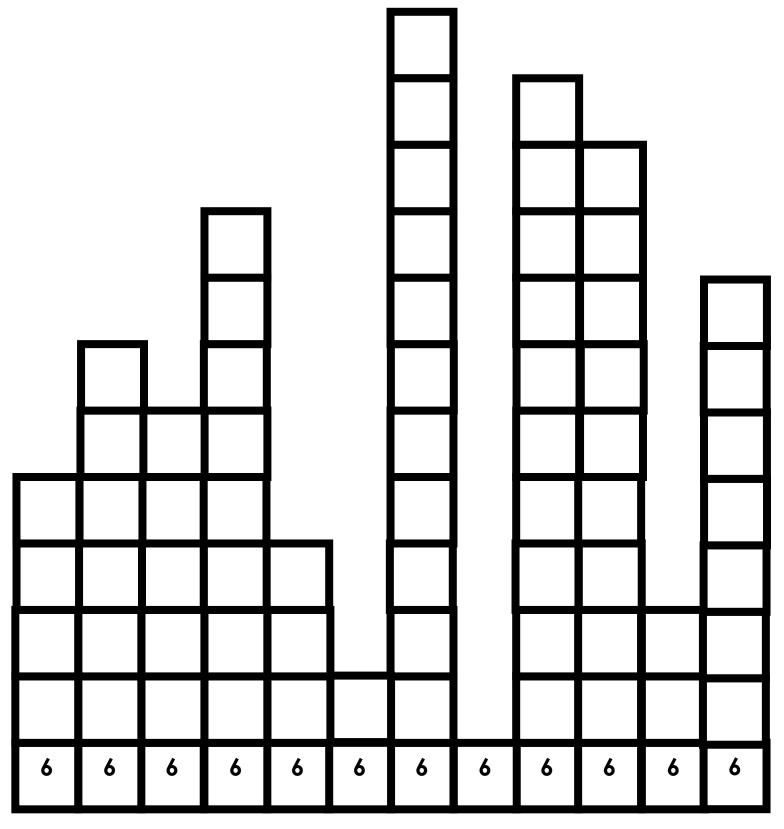
Stair Steps 6s version 1



|--|



Stair Steps 6s version 2



5x6	7x6	6x6	9x6	4x6	2x6	12x6	1x6	11x6	10x6	3x6	8x6



3 x 6 = 18	x =		
3 x 6 =	x =	3 3 3	V V V
3 x 6 =	x =	<u>x6 x6 x6</u>	
5 x 6 = 30	x=		
5 x 6 =	x=	5 5 5	
5 x 6 =	x=	<u>x6 x6 x6</u>	<u> </u>
7 x 6 = 42	x =		
7 x 6 =	x=	7 7 7	
7 x 6 =	x=	<u>x6 x6 x6</u>	<u>X X X</u>
9 x 6 = 54	x =		
9 x 6 =		9 9 9	
	x=	<u>x6 x6 x6</u>	<u>x x x</u>
9 x 6 =	_x_=		
11 x 6 = 66	x =		
11 x 6 =	x=	11 11 11	
11 x 6 =	x =	<u>x6 x6 x6</u>	<u>x x x</u>

	ľ	name	
4 x 6 = 24 4 x 6 = 4 x 6 =	x = x =	4 4 4 <u>x6 x6 x6</u>	<u>x x x</u>
6 x 6 = 36 6 x 6 = 6 x 6 =	x = x =	6 6 6 <u>x6 x6 x6</u>	<u>x x x</u>
8 x 6 = 48 8 x 6 = 8 x 6 =	x = x =	8 8 8 x6 x6 x6	<u>x x x</u>
10 x 6 = 60 10 x 6 = 10 x 6 =	x = x = x =	10 10 10 <u>x6 x6 x6</u>	<u>x x x</u>
12 x 6 = 72 12 x 6 = 12 x 6 =	x = x =	12 12 12 <u>x6 x6</u> <u>x6</u>	<u>x x x</u>

6 x 3 = 18 6 x 3 = 6 x 3 =	x = x =	6 6 6 x3 x3 x3 x x x x
6 x 5 = 30 6 x 5 = 6 x 5 =	x = x =	6 6 6 <u>x5 x5 x5 x x x x</u>
6 x 7 = 42 6 x 7 =	x =	6 6 6 6 x7 x7 x7 x x x
6 x 7 = 6 x 9 = 54 6 x 9 =	x =	6 6 6
6 x 9 =	x = x =	<u>x9 x9 x9 x x x x</u>
6 x 11 = 6 x 11 =	x_=	6 6 6 6 x11 x11 x11 x x x x

		name					
6 x 4 = 24 6 x 4 = 6 x 4 =	x = x =	6 <u>x4</u>	6 <u>x4</u>	6 <u>x4</u>	<u>x_</u>	<u>x</u> _	<u>x</u> _
6 x 6 = 36 6 x 6 = 6 x 6 =	x = x =		6 <u>x6</u>		<u>x</u> _	<u>X</u> _	<u>x_</u>
6 x 8 = 48 6 x 8 = 6 x 8 =	x = x =	6 <u>x8</u>	6 <u>x8</u>		<u>x_</u>	<u>×_</u>	<u>x_</u>
6 x 10 = 60 6 x 10 = 6 x 10 =	x = x =	6 x10	6 x10		<u>x</u> _	<u>X</u>	<u>x_</u>
6 x 12 = 72 6 x 12 = 6 x 12 =	x= x=		6 x12		<u>x_</u>	<u>x_</u>	<u>X_</u>

Fli	p
	Fli

Jack=10	Queen=11	King=12	Ace=1			
Multiply By 6						

START		
		FINISH

Place Deck Here	

Place X Cards Here



name_____

$$x 5 = 30$$

$$x 6 = 54$$







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$$x 12 = 72$$

6

	4	4
V	1	1
Λ	١	-



9

X	

54



 $\frac{x \cdot 6}{42}$

6

x 6



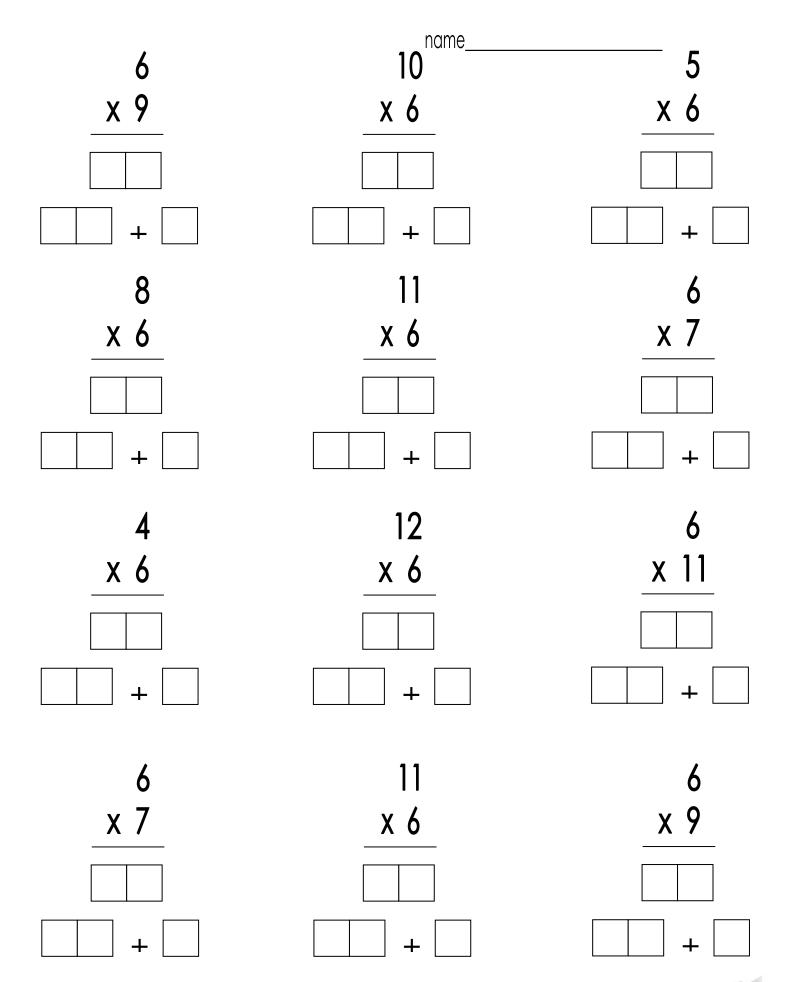




Multiplication Sentence	Repeated Addition Sentence
4 x 6 = 24	6+6+6+6 = 24
6 x 9 =	
6 x 8 =	
7 x 6 =	
6 x 11 =	
9 x 6 =	
3 x 6 =	
6 x 12 =	
6 x 10 =	

Repeat That? 6s version 1

Multiplication Sentence	Repeated Addition Sentence
6 x 9 = 54	9 + 9 + 9 + 9 + 9 + 9 = 54
6 x 7 =	
4 x 6 =	
6 x 12 =	
6 x 6 =	
6 x 5 =	
6 x 10 =	
6 x 9 =	
7 x 6 =	



name			

5 x 6 6 x 4	54 36	2 2 x 6 18	8 x 6 54
10 x 6 6	30 <u>6 x 4</u>	4 6 x 2 1 x 6	6 x 6 42
6 x 5	24 12	6 48	66
10 x 6	6 x 7 6 x 4	4 2 x 6 1 x 6	6 x 5

3 x 6

6 x 8

6 x 5

3 x 6



6 ____ 30 ___ 60

72 54 24 60 24 66

42 18 36

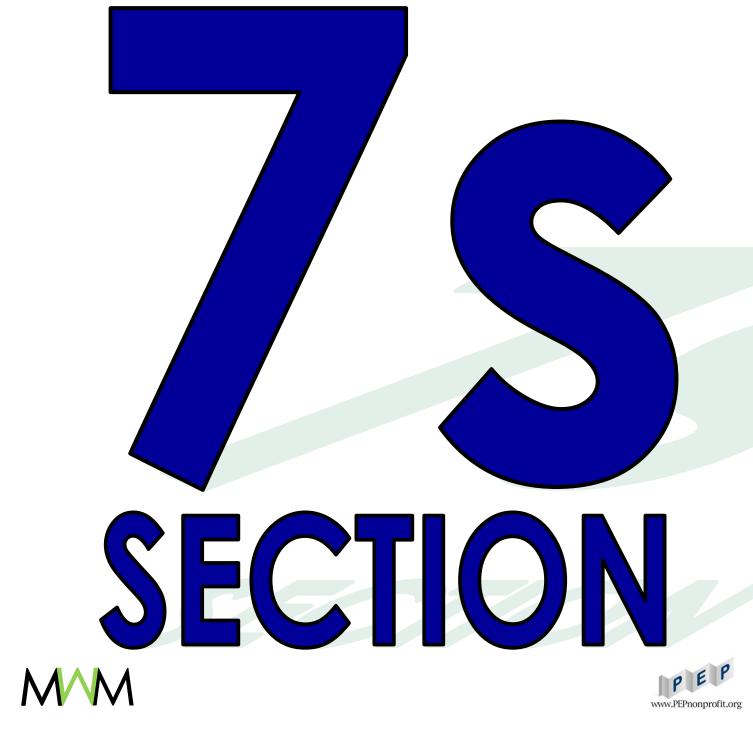
_____6 48 _____36 54 72

2 x 6 3 x 6 6 x 4

42 48 54 18

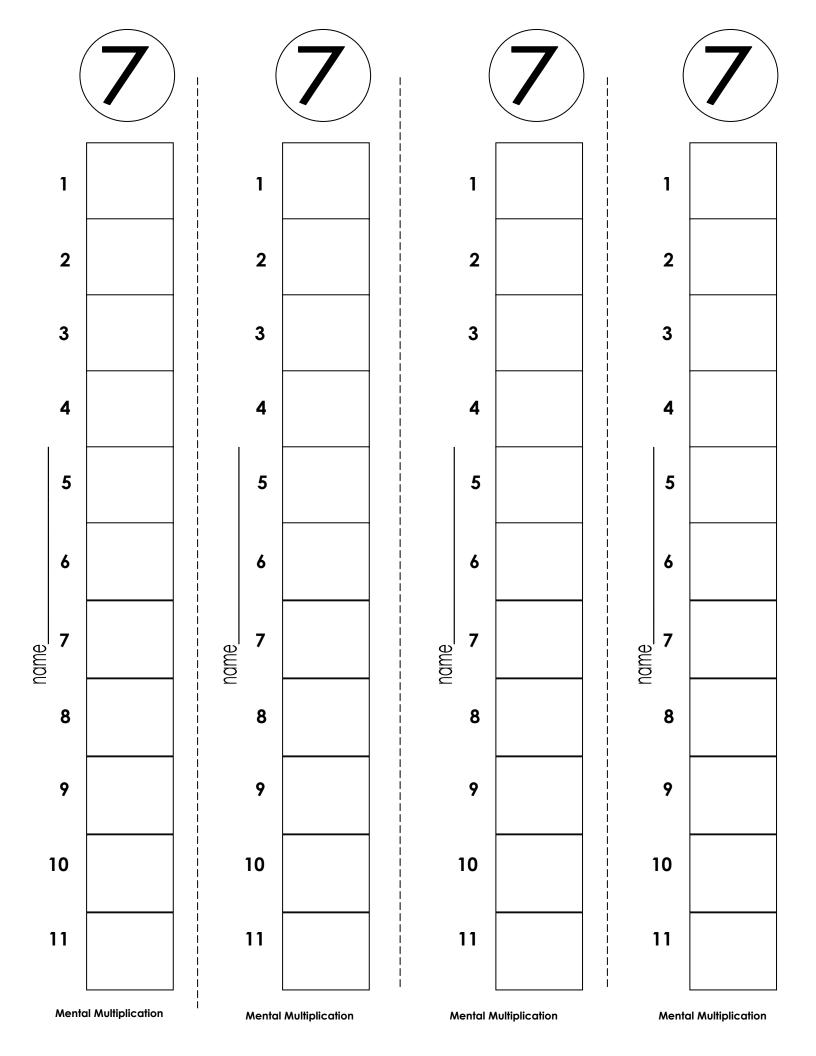


3 x 6









Find The Factors 7s

7	14	21	28	35	42
1 x 7 7 x 1					
49	56	63	70	77	84
			nam	e	

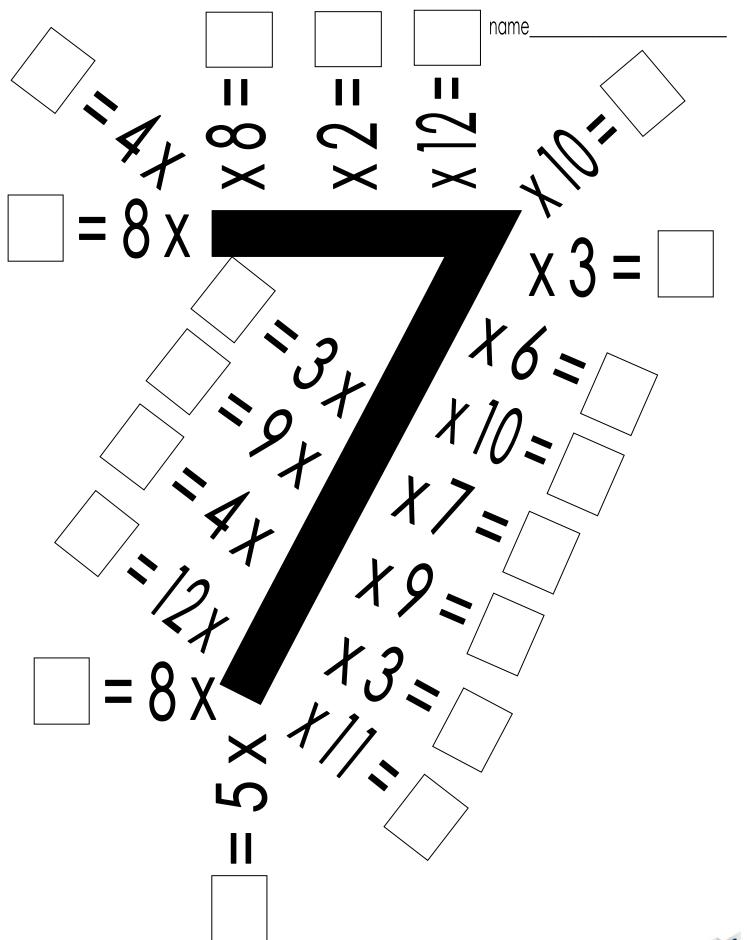


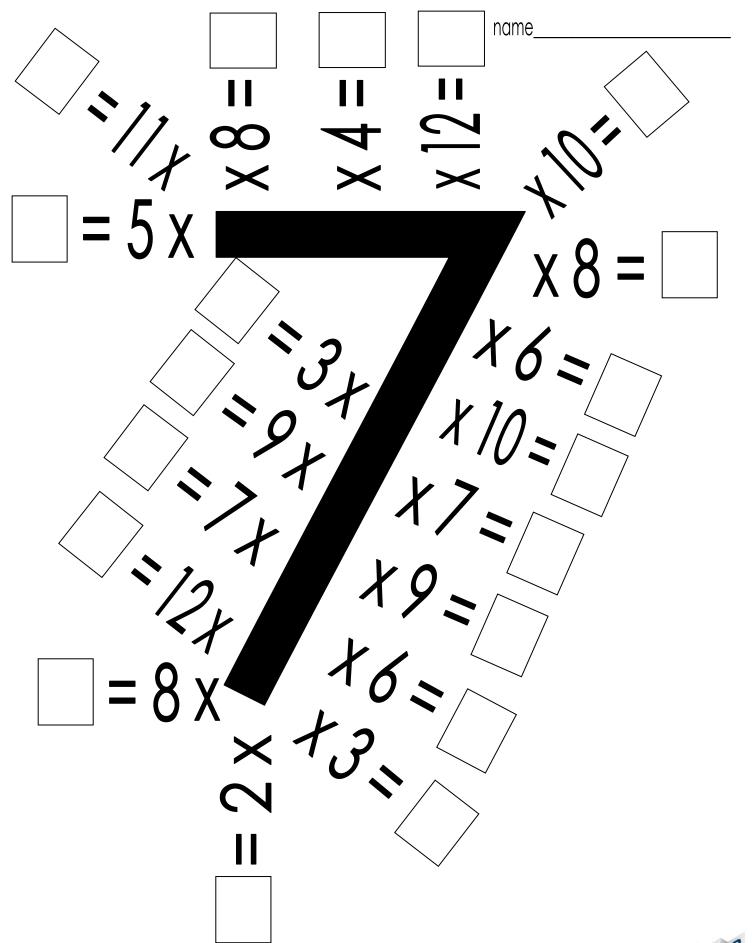
				_
	14	2 x 7	twenty one	
	28	6 x 7	fifty six	
	42	7 x 8	fourteen	Ļ
	56	9 x 7	sixty three	name
1 ر	70	1 x 7	seventy seven	ne
Sior	84	3 x 7	seven	
7s version 1	77	10 x 7	eighty four	
7s	63	7 x 11	forty two	
	49	4 x 7	forty nine	
	35	7 x 12	twenty eight	
	21	7 x 7	thirty five	
	7	5 x 7	seventy	

Multiplication Match

	77	7 x 8	sixty three
	21	9 x 7	twenty eight
	49	2 x 7	eighty four
	7	12 x 7	seven
7	84	1 x 7	forty nine
7s version 2	14	3 x 7	seventy seven
ersi	70	11 x 7	fourteen
7s V	35	7 x 10	forty two
,	28	7 x 6	seventy
	63	4 x 7	twenty one
	42	5 x 7	thirty five
	56	7 x 7	fifty six

Multiplication Match





Word Problem?	<u>Numeric Answer</u>
There are 7 light bulbs in each package. How many light bulbs	Complete Sentence Answer
are there in 7 packages?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each video game costs \$12. How much would 7 video games cost?	Complete Sentence Answer
9	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Devin has 10 packs of stamps. Each pack holds 7 stamps. How many	Complete Sentence Answer
total stamps does Devin have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
There are 8 donuts in a box. How many donuts are there in 7 boxes?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each boy has 7 coins. If there are 9 boys, how many coins are there in	Complete Sentence Answer
total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Bryan read 7 books. Each book has 11 pages. How many pages did Bryan	Complete Sentence Answer
read?	<u>Visual Answer</u>



name

Word Problem ?	<u>Numeric Answer</u>
Max buys 7 boxes of chocolates. Each box has 7 chocolates. How	Complete Sentence Answer
many chocolates does Max have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each student has 8 markers. How many markers do 7 students have?	Complete Sentence Answer
siederiis riave.	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Each boy has 12 toy cars. If there are 7 boys, how many toy cars are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

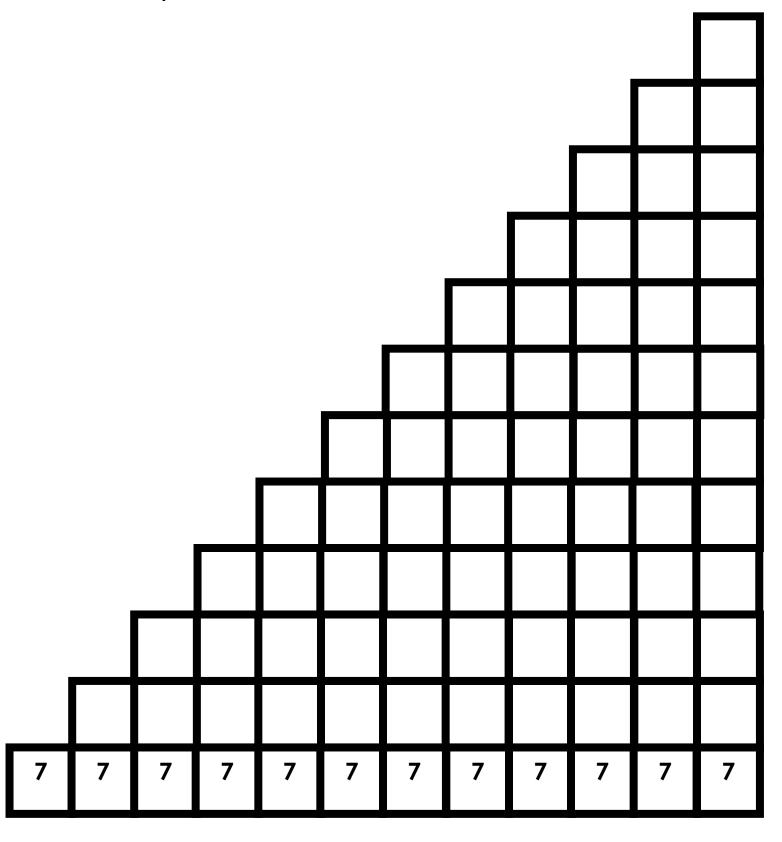
<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 7 marbles in each box. How many marbles are in 9	Complete Sentence Answer
boxes?	<u>Visual Answer</u>

Word Problem ?	<u>Numeric Answer</u>
Steve has 4 boxes of muffins. If each box has 7 muffins, how many muffins	Complete Sentence Answer
are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Esme buys 11 packs of cookies. Each pack has 7 cookies in it. How	Complete Sentence Answer
many cookies does Esme have?	<u>Visual Answer</u>

name

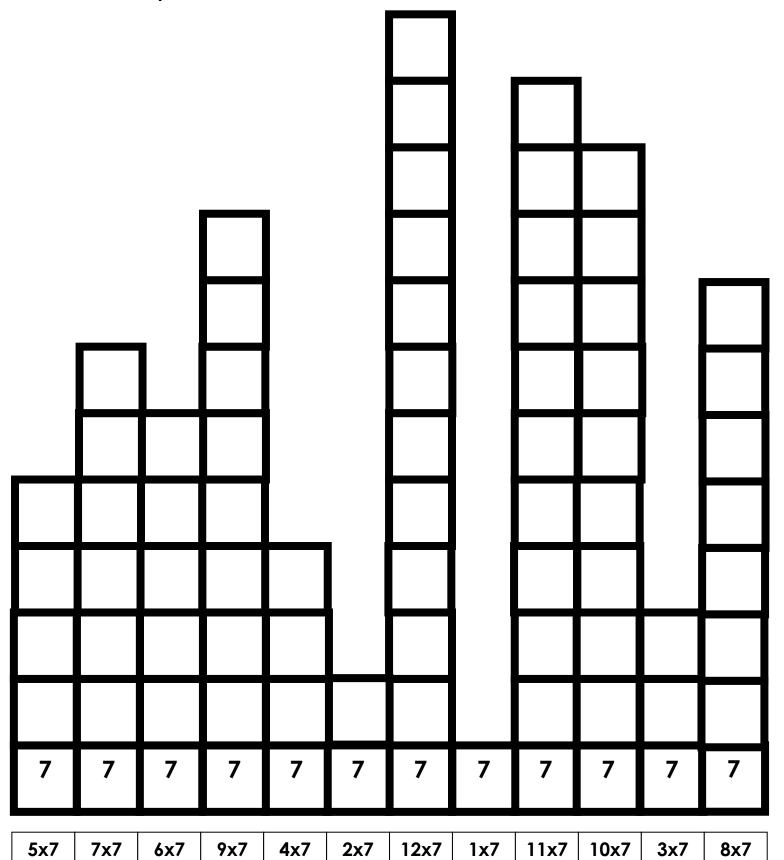
Stair Steps 7s version 1



1x7	2x7	3x7	4x7	5x7	6x7	7x7	8x7	9x7	10x7	11x7	12x7



Stair Steps 7s version 2





$3 \times 7 = 21$ $3 \times 7 =$ $3 \times 7 =$	x = x =	3 3 3 <u>x7 x7 x7</u>	<u>x x x</u>
5 v 7 - 25			
5 x 7 = 35 5 x 7 =	x =	5 5 5 <u>x7 x7 x7</u>	<u>x x x</u>
5 x 7 =	x =		
7 x 7 = 49 7 x 7 =	x =	7 7 7	
7 x 7 =	x=	<u>x7</u> <u>x7</u> <u>x7</u>	<u>x x x</u>
9 x 7 = 63	x=		
9 x 7 =	_x_=_	9 9 9 <u>x7 x7 x7</u>	x x x
9 x 7 =	x=	<u> </u>	<u> </u>
11 x 7 = 77	x=		
11 x 7 =	x =	11 11 11 x7 x7 x7	<u>x x x</u>
11 x 7 =	x =		<u> </u>

		MITIC	
4 x 7 = 28 4 x 7 = 4 x 7 =	x = x =	4 4 4 <u>x7 x7</u> <u>x7</u>	<u>x x x</u>
6 x 7 = 42 6 x 7 = 6 x 7 =	x = x = x =	6 6 6 <u>x7 x7 x7</u>	<u>x x x</u>
8 x 7 = 56 8 x 7 = 8 x 7 =	x = x =	8 8 8 <u>x7 x7 x7</u>	<u>x x x</u>
10 x 7 = 70 10 x 7 = 10 x 7 =	x = x =	10 10 10 <u>x7 x7 x7</u>	<u>x x x</u>
12 x 7 = 84 12 x 7 = 12 x 7 =	x= x=	12 12 12 _x7 x7 x7	<u>x x x</u>

7 x 3 = 21	x=			
7 x 3 =	x=	7 7	7 V	v v
7 x 3 =	x =	<u>xo xo 2</u>		<u>x</u> <u>x</u>
7 x 5 = 35	x=			
7 x 5 =	x=	7 7	7	
7 x 5 =	x =	<u>x5 x5 x</u>	5 x	<u>x</u> <u>x</u>
7 x 7 = 49	x=			
7 x 7 =	x=	7 7	7	
7 x 7 =		7 7 <u>x7</u> <u>x7</u> <u>x</u>	<u>×7</u> <u>x</u>	<u>x</u> <u>x</u>
	^			
7 x 9 = 63	v =			
$7 \times 7 = 65$ $7 \times 9 =$	x=	7 7	7	
	x =	<u>x9</u> <u>x9</u> <u>x</u>		<u>x x</u>
7 x 9 =	x=			
7 x 11 = 77	x =			
7 x 11 =	x =	7 7		
7 x 11 =	x=	<u>x11 x11 x</u>	X	<u>X</u> <u>X</u>

7 x 4 = 28 7 x 4 = 7 x 4 =	x = x =	7 <u>x4</u> x	7 7 <u>44 x4</u>	<u>x_</u>	<u>x_</u>	<u>X_</u>
7 x 6 = 42	x =					
7 x 6 =	x =	7	7 7 <u>x6</u> <u>x6</u>	Y	Y	Y
7 x 6 =	x =	<u> </u>	<u> </u>			<u> </u>
7 x 8 = 56	x=					
7 x 8 =	x =	7	7 7 <u><8</u> <u>x8</u>	Y	Y	Y
7 x 8 =	x =	<u> </u>	<u>10 </u>		^_	<u>^_</u>
7 x 10 = 70	x=					
7 x 10 =	x=		7 7 10 x10	×	<u>X_</u>	X
7 x 10 =	x=				<u>~_</u>	<u> </u>
7 x 12 = 84	x=					
7 x 12 =	x=	7 x12 x	7 7	V	V	V
7 x 12 =	x =	\ \frac{\lambda{12}}{\lambda}	12 x12	<u>X_</u>	<u>X_</u>	<u>X_</u>

Jack=10	Queen=11	King=12	Ace=1			
Multiply By 7						

START		
		FINISH

Place Deck Here		

•
Place X Cards Here



name

name

7 x

$$x 7 = 63$$

$$| x | 11 = 77$$







$$\frac{x}{49}$$



$$x 12 = 84$$





$$\frac{x \cdot 6}{42}$$

x 7





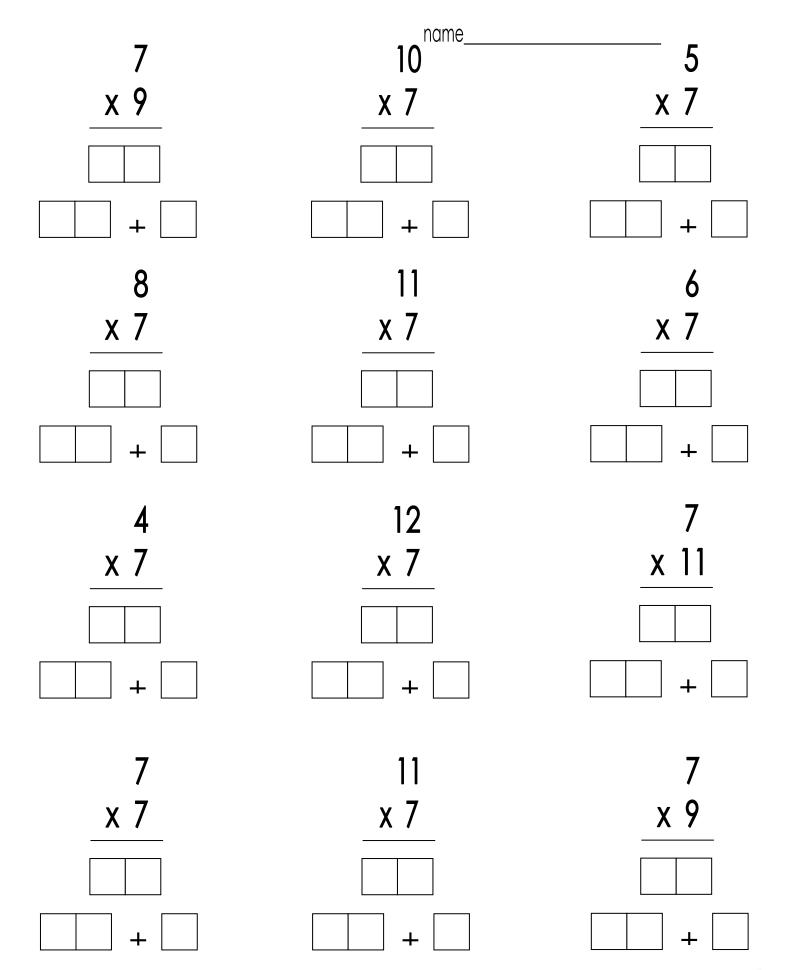


Multiplication Sentence	Repeated Addition Sentence
4 x 7 = 28	7 + 7 + 7 + 7 = 28
7 x 9 =	
7 x 8 =	
7 x 7 =	
7 x 11 =	
9 x 7 =	
3 x 7 =	
7 x 12 =	
7 x 10 =	

Repeat That? 7s version 1

Multiplication Sentence	Repeated Addition Sentence
7 x 9 = 63	9 + 9 + 9 + 9 + 9 + 9 + 9 = 63
6 x 7 =	
4 x 7 =	
7 x 12 =	
7 x 7 =	
7 x 5 =	
7 x 10 =	
7 x 9 =	
7 x 8 =	

name_ 12 x 8 x 7 x 7 5 8 10 x 7 x 7 x 7 x 7 x 7 x 7 5 12 x 7 x 7 8 X



name____

$$7 \times 5 = \boxed{ 12 \times 7 = \boxed{ }}$$

5 x 7 7 x 4	7 x 2 7 x	6 8 x 7	
63			49
	7 x 4 7 x 35	2 1 x 7 6 x 7	56
7 x 5	7 x 7 77	7 49 84	7 x 9
70	7 x 4 2 x 42	7 1 x 7 7 x 5	
3 x 7	7 x 8 7 x 5		3 x 7

name

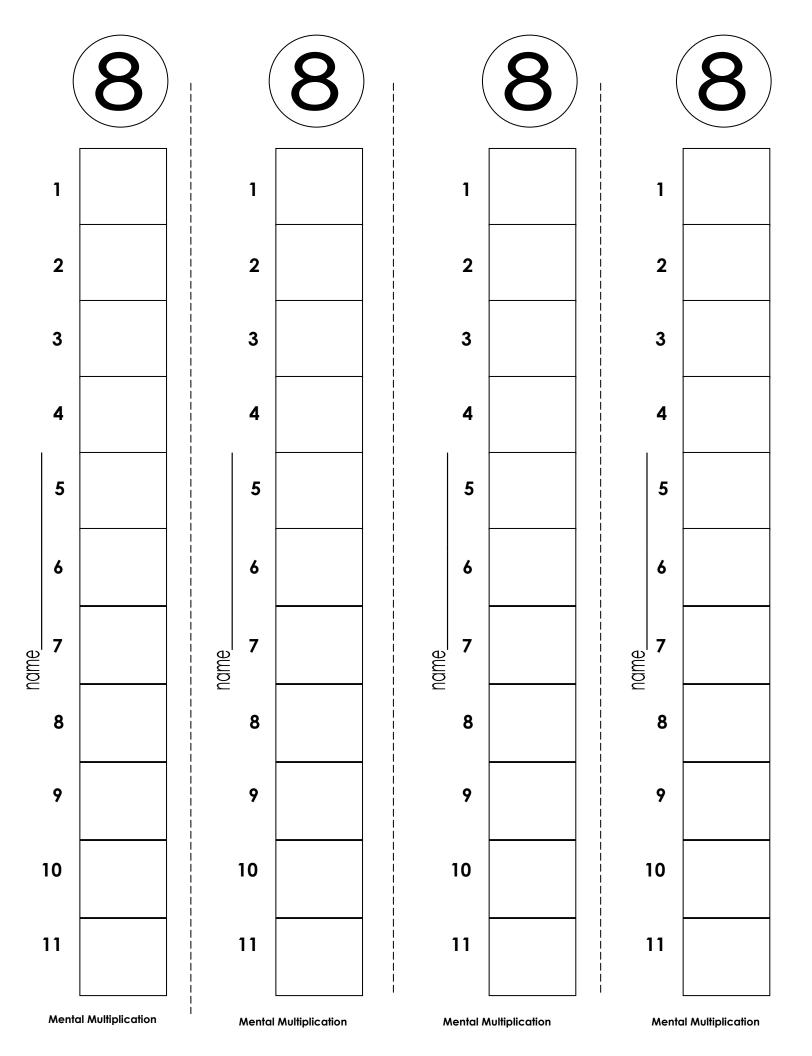
7 x 4 6 x 7			7 x 2	6 x 7		8 x 7	
	84	42			14		49
7	7 x 12	35	9 x 7	7 x 1	9 x 7	7 x 6	
7 x 9	56	56	11 x 7			28	7 x 8
12 x 7 42	7 x 8		7 x 3	7 x 8	7 x 7	6 x 7	49
2 x 7 7	49	7 x 8	7 x 4	35	56	70	7 x 9

7 x 4 1 x 7		7 x 5 3 x 7	8 x	7
·	35 14		7	49
11 x 7	7 x 10 42	7 x 4 7 x 7	7 x 9 7 x	42
7 x 9	77 70	11 x 7 35	84 7	70 4 x 7
12 x 7	4 x 7	8 x 7 3 x 7	7 x 2	70 63
2 x 7	3 x 7	7 x 4 84	56	3 x 7

SECTION







Find The Factors 8s

8	16	24	32	40	48
1 x 8					
8 x 1 2 x 4					
<u>4 x 2</u>					
		70	90	00	96
56	64	72	80	88	70
					
		······································			



name_____

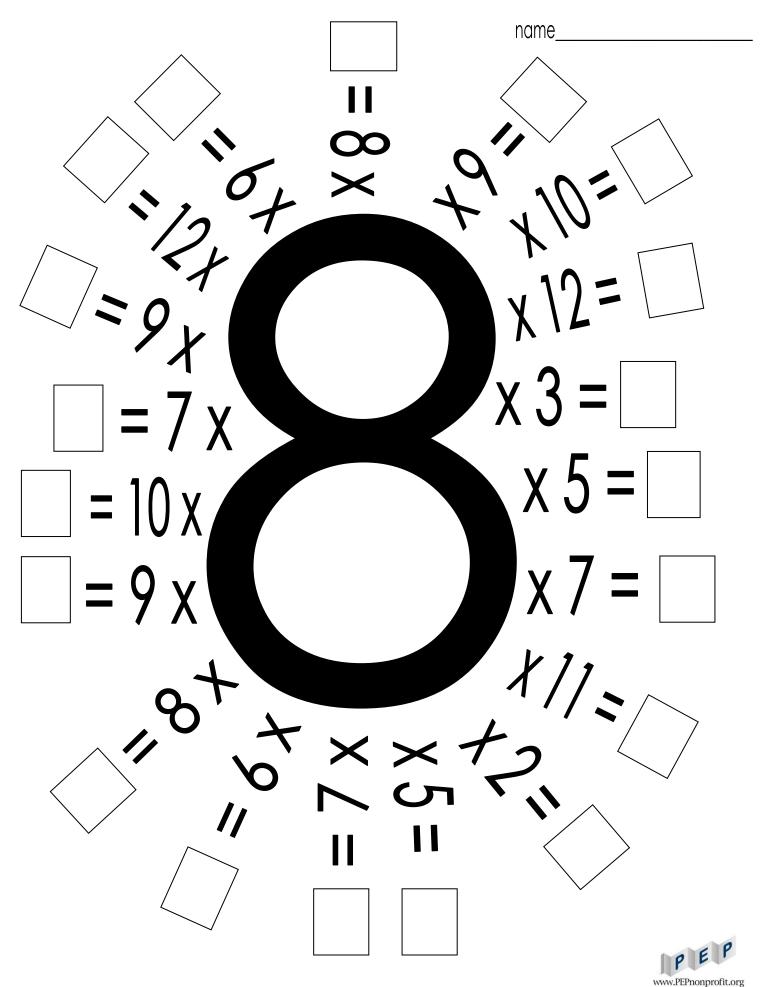
	16	2 x 8	twenty four
	32	6 x 8	sixty four
	56	8 x 8	sixteen
	64	9 x 8	seventy two
<u>_</u>	80	1 x 8	eighty eight 🔘
8s version 1	96	3 x 8	eight
ve.	88	10 x 8	ninety six
88	72	8 x 11	forty eight
	8	4 x 8	fifty six
	24	8 x 12	thirty two
	40	7 x 8	forty
	48	5 x 8	eighty

Multiplication Match

	00	0 0	
	88	8 x 8	seventy two
	24	9 x 8	thirty two
	56	2 x 8	ninety six
	8	12 x 8	eight
7	96	1 x 8	eight Q fifty six
ion	16	3 x 8	eighty eight
ersi	80	11 x 8	sixteen
8s version 2	40	8 x 10	forty eight
••	32	8 x 6	eighty
	72	4 x 8	twenty four
	48	5 x 8	forty
	64	7 x 8	sixty four

Multiplication Match

		name
	\ _\ \	
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	\times '	1,02
	*	, 1/1/2 -
> 9 v		x8=
		v 2 –
= 6 x		x 3 =
		x 6 =
$\square = 10 x$		X 0 —
		v 7 –
$\square = \lambda X$		/ / –
		X11
87		
5	$\times \times 7$	5
	4 /	
	II II	
7		PEP
_		www.PEPnonprofit.org



			name
<u>Word Problem</u> ?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
There are 8 bagels in each package. How many bagels are there in 7	Complete Sentence Answer	Each movie ticket costs \$12. How much would 8 movie tickets cost?	Complete Sentence Answer
packages?	<u>Visual Answer</u>	THOVIE IICKEIS COSTY	<u>Visual Answer</u>
<u>Word Problem</u> ?	Numeric Answer	Word Problem?	Numeric Answer
Pat has 10 packs of mints. Each pack holds 8 mints. How many total mints	Complete Sentence Answer	There are 8 crackers in a box. How many crackers are there	Complete Sentence Answer
does Pat have?	<u>Visual Answer</u>	in 8 boxes?	<u>Visual Answer</u>
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Word Problem? Each child has 8 Valentine cards. If there are 9	Complete Sentence Answer	Joy read 8 magazines. Each magazine has 11 pages. How many	Complete Sentence Answer
children, how many Valentine	<u>Visual Answer</u>	pages did Joy read?	<u>Visual Answer</u>

many Valentine cards are there in total?

Word Problem?	<u>Numeric Answer</u>
Tre buys 8 boxes of gummy worms. Each box has 9 gummy worms.	Complete Sentence Answer
How many gummy worms does Tre have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each student has 8 colored pencils. How many colored pencils do 12	Complete Sentence Answer
students have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each boy has 12 comic books. If there are 8 boys, how many comic	Complete Sentence Answer
books are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 7 eggs in each carton. How many eggs are in 8 cartons?	Complete Sentence Answer
	<u>Visual Answer</u>

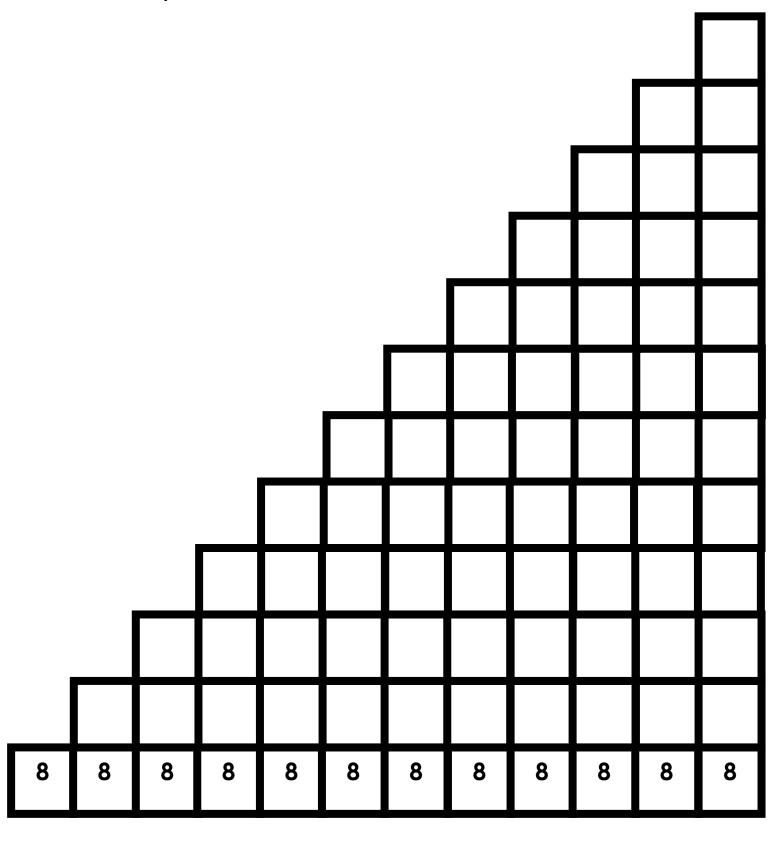
Word Problem?	<u>Numeric Answer</u>
Mrs. Smith has 4 boxes of chalk. If each box has 8 pieces of chalk,	Complete Sentence Answer
how many pieces of chalk are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Troy buys 11 packs of batteries. Each pack has 8 batteries in it. How	Complete Sentence Answer
many batteries does Troy have?	<u>Visual Answer</u>



name			

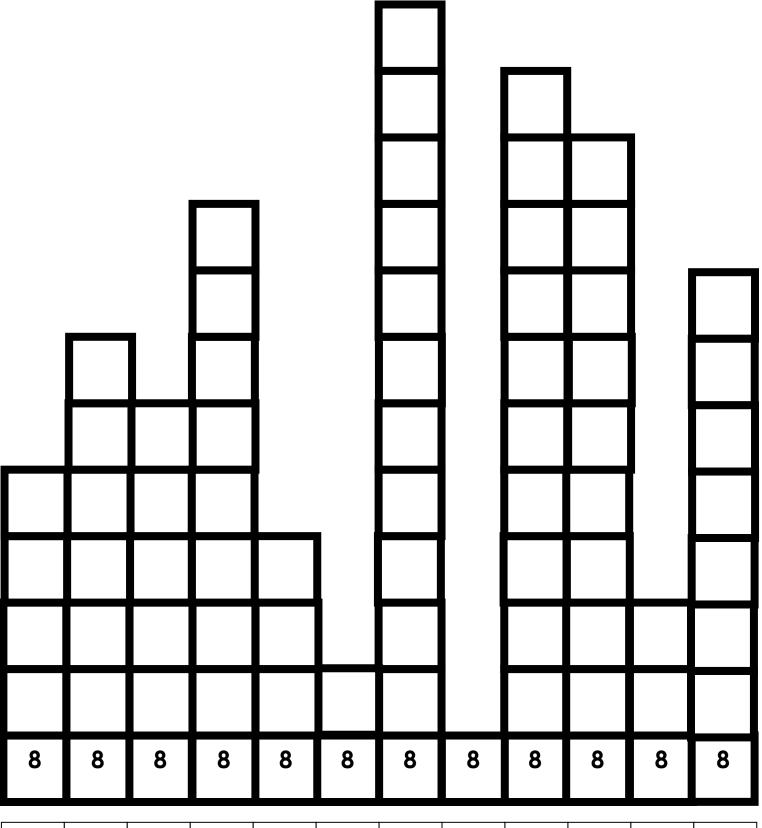
Stair Steps 8s version 1



1x8	2x8	3x8	4x8	5x8	6x8	7x8	8x8	9x8	10x8	11x8	12x8



Stair Steps 8s version 2



|--|



3 x 8 = 24 3 x 8 = 3 x 8 =	x = x =	3 3 3 <u>x8 x8 x8 x8 x x x x</u>
5 x 8 = 40 5 x 8 = 5 x 8 =	x = x =	5 5 5 <u>x8 x8 x8 x8 x x x x</u>
7 x 8 = 56 7 x 8 = 7 x 8 =	x = x =	7 7 7 <u>x8 x8 x8 x8 x x x x</u>
9 x 8 = 72 9 x 8 = 9 x 8 =	x = x =	9 9 9 <u>x8 x8 x8 x x x x</u>
11 x 8 = 88 11 x 8 = 11 x 8 =	x_= x_=	11 11 11 <u>x8 x8 x8 x x x x</u>

4 x 8 = 32 4 x 8 = 4 x 8 =	x = x =	4 4 4 <u>x8 x8 x8</u>	<u>x x x</u>
6 x 8 = 48 6 x 8 = 6 x 8 =	x = x = x =	6 6 6 <u>x8 x8 x8</u>	<u>x x x</u>
8 x 8 = 64 8 x 8 = 8 x 8 =	x = x =	8 8 8 <u>x8 x8 x8</u>	<u>x x x</u>
10 x 8 = 80 10 x 8 = 10 x 8 =	x = x =	10 10 10 <u>x8 x8 x8</u>	<u>x x x</u>
12 x 8 = 96 12 x 8 = 12 x 8 =	x= x=	12 12 12 <u>x8 x8</u> <u>x8</u>	<u>x x x</u>

8 x 3 = 24 8 x 3 = 8 x 3 =	x = x =	8 8 8 x3 x3 x3 x x x x
8 x 5 = 40 8 x 5 = 8 x 5 =	x = x =	8 8 8 x5 x5 x5 x x x x
8 x 7 = 56 8 x 7 = 8 x 7 =	x = x =	8 8 8 <u>x7</u> <u>x7</u> <u>x7</u> <u>x7</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u> <u>x</u>
8 x 9 = 72 8 x 9 = 8 x 9 =	x= x=	8 8 8 <u>x9 x9 x9</u> <u>x x x x</u>
8 x 11 = 88 8 x 11 = 8 x 11 =	x= x=	8 8 8 8 x11 x11 x x x x

8 x 4 = 32 8 x 4 = 8 x 4 =	x = x =	8 <u>x4</u>	8 <u>x4</u>	8 <u>x4</u>	<u>×_</u>	<u>x_</u>	<u>x_</u>
8 x 6 = 48 8 x 6 = 8 x 6 =	x = x =		8 <u>x6</u>	8 <u>x6</u>	<u>X</u> _	<u>X</u> _	<u>x</u> _
8 x 8 = 64 8 x 8 = 8 x 8 =	x = x =		8 <u>x8</u>	8 <u>x8</u>	<u>X</u> _	<u>x_</u>	<u>x</u> _
8 x 10 = 80 8 x 10 = 8 x 10 =	x = x =	8 x10	8 x10		<u>x</u> _	<u>x</u> _	<u>x</u> _
8 x 12 = 96 8 x 12 = 8 x 12 =	x= x=	I	8 <u>x12</u>	8 <u>x12</u>	<u>x</u> _	<u>x</u> _	<u>X_</u>

52	FI	ip
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name			

Jack=10	Queen=11	King=12	Ace=1			
Multiply By 8						

START		
		FINISH

Place Deck Here

Place X Cards Here



name_____

name_____

8 x = 16

8 x 7 =

8 x 8 =

12 x 8 =

x 8 = 72

6 x = 48

8 x 10 =

8 x = 16

8 x 1 =

___ x 11 = 88

3 x 8 =

8 x = 72

8 x 6 =

7 x 8 =

8

x 8

9

X____

72

 $\frac{x 7}{56}$

8

x 5



8 x = 24

8 x 7 =

x 12 = 96

8 x 8 =

12 x 8 =

x 8 = 72

8 x = 56

8 x 10 =

9 x = 72

8 x 4 =

3 x 8 =

8 x = 72

6 x 8 =

8 x 11 =

8

x 11

9

X

72

x 6 48

8

x 7







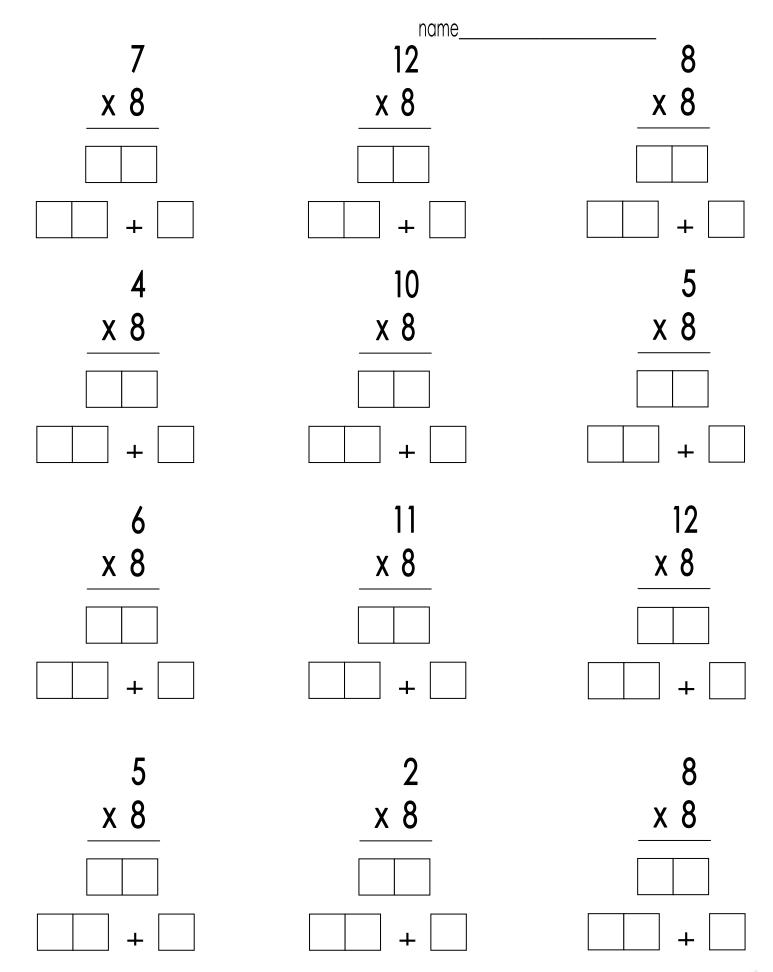
name_____

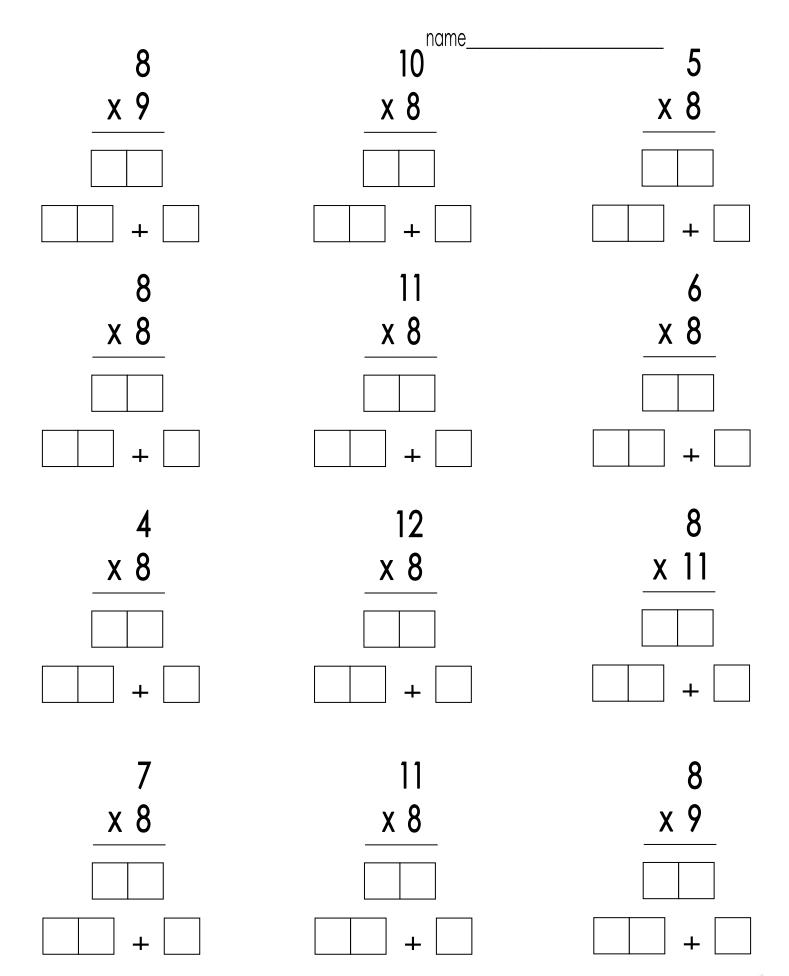
Multiplication Sentence	Repeated Addition Sentence
4 x 8 = 32	8 + 8 + 8 + 8 = 32
8 x 9 =	
8 x 8 =	
7 x 8 =	
8 x 11 =	
9 x 8 =	
3 x 8 =	
8 x 12 =	
8 x 10 =	

Repeat That? 8s version 1

name_____

Multiplication Sentence	Repeated Addition Sentence
8 x 9 = 72	9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = 72
6 x 8 =	
4 x 8 =	
8 x 12 =	
8 x 7 =	
8 x 5 =	
8 x 10 =	
8 x 9 =	
8 x 8 =	





name____

name		
_		

5 x 8 8 x 4 72	8 x 2 40	8 x 6	8 x 7 64
10 x 8 8 x 7 24		8 x 2 1 x 8	6 x 8 56
8 x 5	32	88 48	96
12 x 8 7 x 8 80		2 x 8 1 x 8	8 x 5
3 x 8	7 x 8 8 x 5		4 x 8

name_		

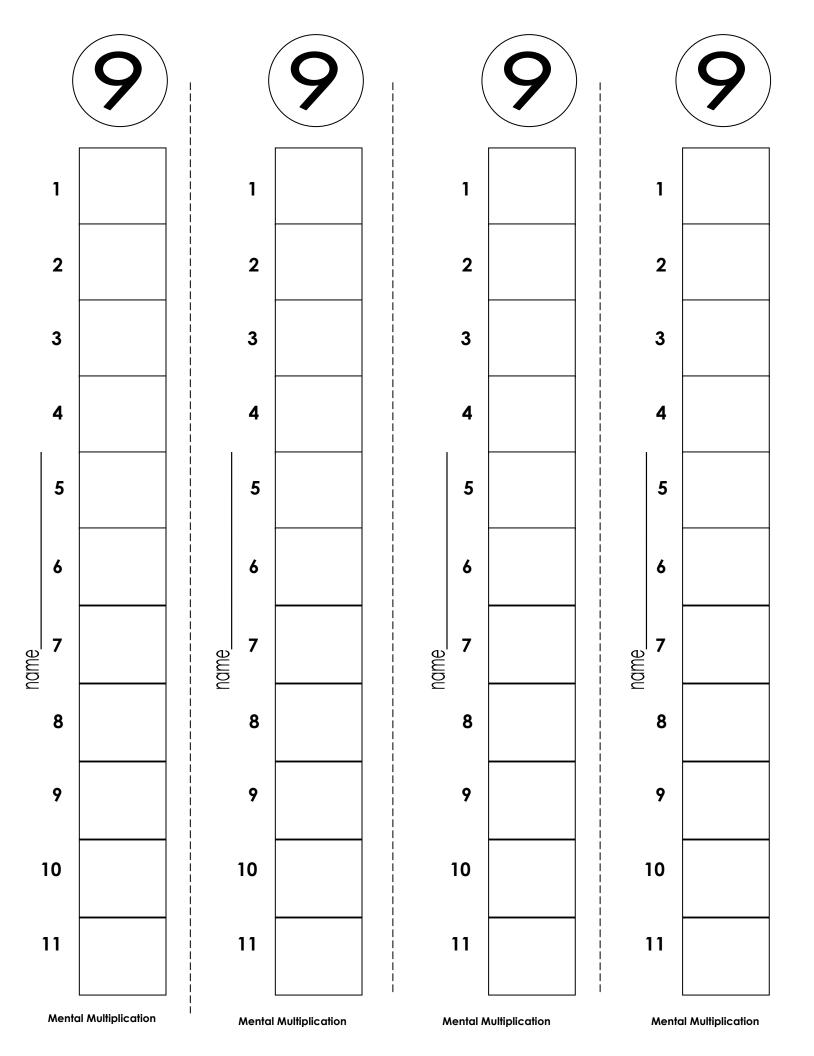
8 x 4 6 x 8			8 x 2	6 x 8		8 x 7	
	96	_40_			16		48
11 x 8	8 x 12		9 x 8	8 x 1	9 x 8	8 x 6	
		32					80
8 x 9			11 x 8				8 x 8
88		56		80	_32_	24	
12 x 8	7 x 8		8 x 3	8 x 8	8 x 3	6 x 8	
		64					88
2 x 8		7 x 8	8 x 4				8 x 9

name

8 >	(4) 1 x 8		8 x 5 3 x 8	8	x 8
		32 16			56
1		× 10 48	8 x 4 7 x 8	8 x 9 8	x 6 40
8 >		88 80	11 x 8 32		96
4		x 8 24	8 x 8 3 x 8	8 x 2	80 64
2 2		3 x 8	8 x 4 96	56	3 x 8







Find The Factors 9s

9	18	27	36	45	54
1 x 9					
9 x 1					
3 x 3					
					
63	72	81	90	99	108
i				:i	
PEP	name				

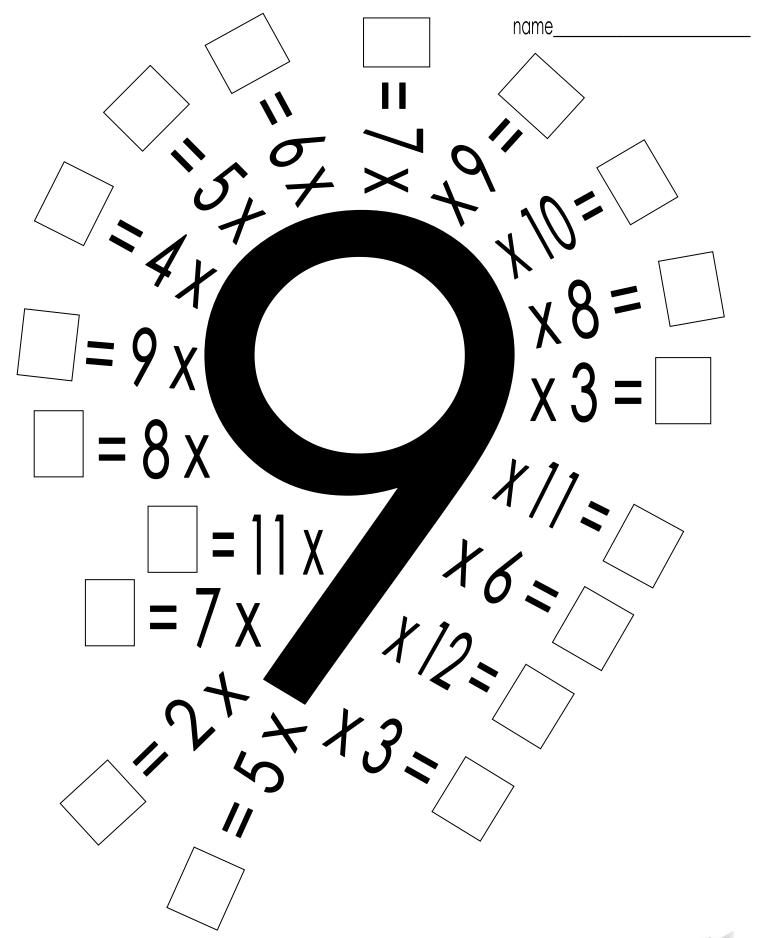
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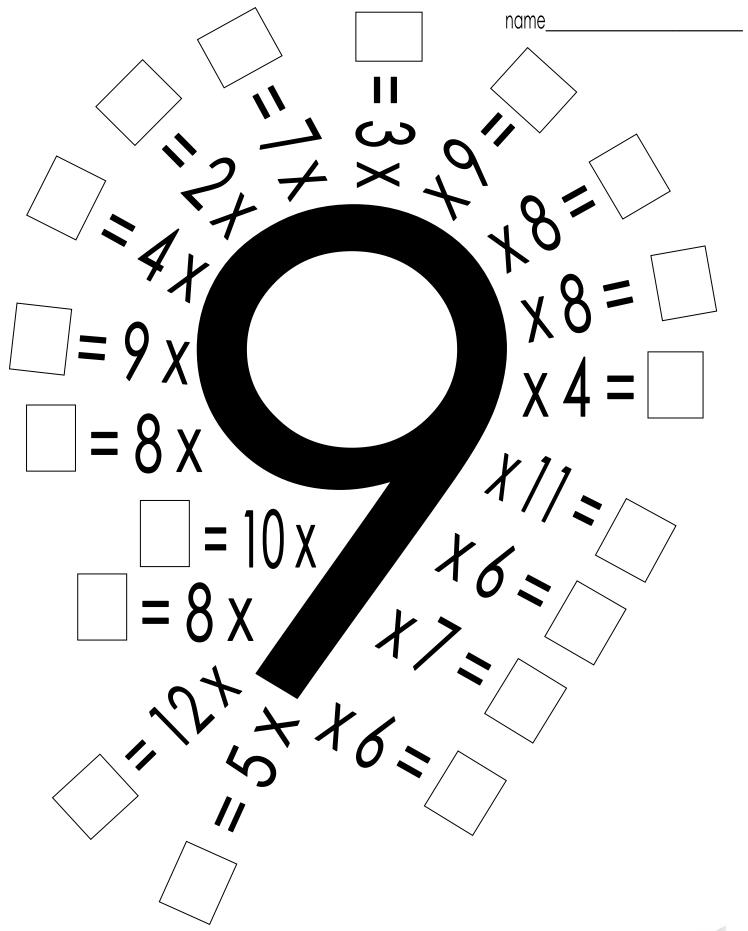
	18	2 x 9	twenty seven
	36	6 x 9	seventy two
	63	8 x 9	eighteen
	72	9 x 9	eighty one
_	90	1 x 9	eignty one ninety nine
9s version 1	108	3 x 9	nine
ver	99	10 x 9	one hundred eight
9s	81	9 x 11	fifty four
	9	4 x 9	sixty three
	27	9 x 12	thirty six
	45	7 x 9	forty five
	54	5 x 9	ninety

Multiplication Match

ſ			
ı	99	8 x 9	eighty one
	27	9 x 9	thirty six
	63	2 x 9	one hundred eight
	9	12 x 9	nine
7	108	1 x 9	sixty three
0	18	3 x 9	ninety nine
ersi	90	11 x 9	eighteen
3s <	45	9 x 10	fifty four
	36	9 x 6	ninety
	81	4 x 9	twenty seven
	54	5 x 9	forty five
	72	7 x 9	seventy two
9s version 2	45 36 81 54	9 x 10 9 x 6 4 x 9 5 x 9	fifty four ninety twenty seven forty five

Multiplication Match





name	
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Word Problem?	<u>Numeric Answer</u>
There are 9 fire logs in each package. How many logs of fire are there in 3	Complete Sentence Answer
packages?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each baseball hat costs \$9. How much would 9 baseball hats cost?	Complete Sentence Answer
	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Brad has 6 packs of pencils. Each pack holds 9 pencils. How many	Complete Sentence Answer
total pencils does Brad have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 8 index cards in a box. How many index cards are there in 9	Complete Sentence Answer
boxes?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each child has 4 erasers. If there are 9 children, how many erasers are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

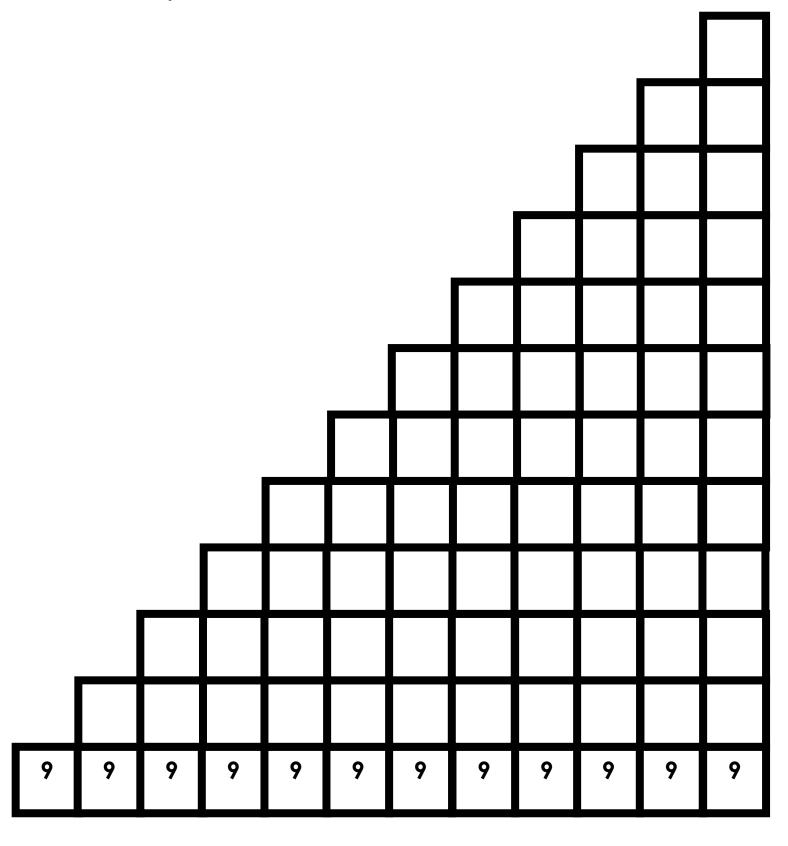
<u>Word Problem</u> ?	<u>Numeric Answer</u>
Jorge wrote 9 stories. Each story has 11 pages. How many pages did Jorge	Complete Sentence Answer
write?	<u>Visual Answer</u>



			name
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Lexi buys 5 bags of beef jerky. Each bag has 9 pieces of jerky. How	Complete Sentence Answer	Each student has 9 raffle tickets. How many raffle tickets do 12 students	Complete Sentence Answer
many pieces of jerky does Lexi have?	have?	<u>Visual Answer</u>	
Word Problem?	Numeric Answer	Word Problem?	Numeric Answer
Each boy has 7 bugs. If there are 9 boys, how many bugs are there in	Complete Sentence Answer	There are 6 bananas in a bunch. How many bananas are in 9	Complete Sentence Answer
total?	<u>Visual Answer</u>	bunches?	<u>Visual Answer</u>
<u>Word Problem</u> ?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
Jack has 4 boxes of legos. If each box has 9 legos in it, how many lego	Complete Sentence Answer	Brooke buys 11 bags of mini cupcakes. Each bag has 9 mini	Complete Sentence Answer
blocks are there in total?	<u>Visual Answer</u>	cupcakes in it. How many cupcakes does Brooke have?	<u>Visual Answer</u>

name	
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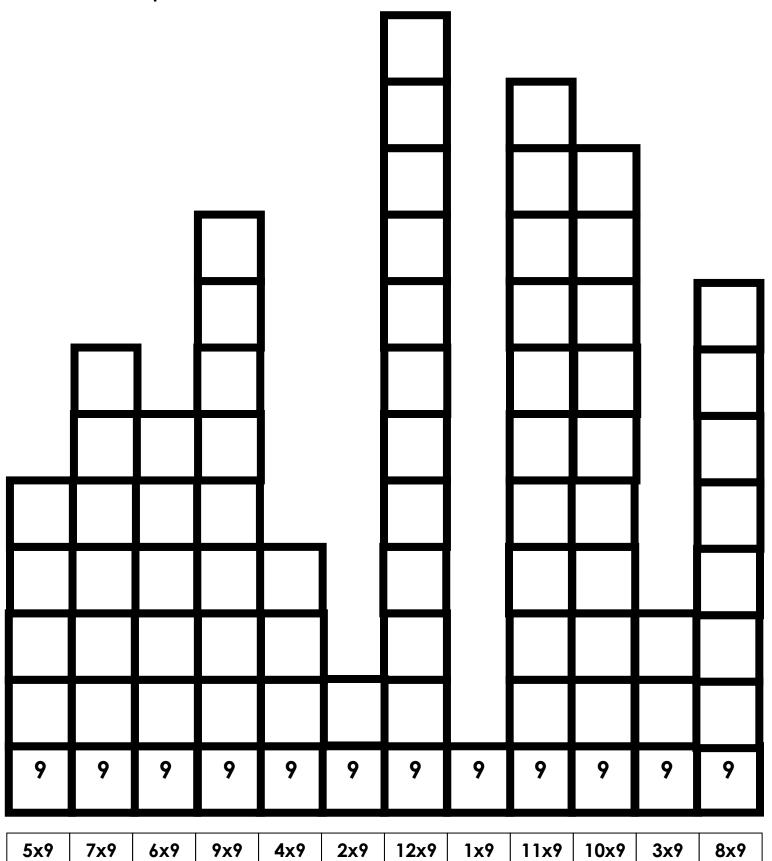
Stair Steps 9s version 1



1x9	2x9	3x9	4x9	5x9	6x9	7x9	8x9	9x9	10x9	11x9	12x9	
-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	--



Stair Steps 9s version 2







$3 \times 9 = 27$ $3 \times 9 =$ $3 \times 9 =$	x = x =	3 3 3 <u>x9 x9 x9</u>	<u>x x x</u>
5 x 9 = 45 5 x 9 = 5 x 9 =	x = x =	5 5 5 <u>x9 x9 x9</u>	<u>x x x</u>
7 x 9 = 63 7 x 9 = 7 x 9 =	x = x =	7 7 7 <u>x9 x9 x9</u>	<u>x x x</u>
9 x 9 = 81 9 x 9 = 9 x 9 =	x = x =	9 9 9 <u>x9 x9 x9</u>	<u>x x x</u>
11 x 9 = 99 11 x 9 = 11 x 9 =	x= x=	11 11 11 <u>X9</u> <u>x9</u> <u>x9</u>	<u>x x x</u>

9 x 3 = 27	x =						
9 x 3 =	x=	9	9	9	V	.,	V
9 x 3 =	x =	<u>x3</u>	<u>x3</u>	<u>x3</u>	<u>×</u> _	<u>X_</u>	<u>X_</u>
9 x 5 = 45	x =						
9 x 5 = 45 9 x 5 =	x =	9 <u>x5</u>	9 <u>x5</u>	9	V	<u>x</u>	

9 x 4 = 36	x =						
9 x 4 =	x =	9	9	9			
9 x 4 =	x =	<u>x4</u>	<u>x4</u>	<u>x4</u>	<u>X</u>	<u>X_</u>	<u>x_</u>

9 x 12 = 108	x =		
9 x 12 =	x =	9 9 9	
9 x 12 =	x=	<u>x12</u> <u>x12</u> <u>x12</u>	<u> </u>

name	
------	--

Jack=10	Queen=11	King=12	Ace=1			
Multiply By 9						

START		
		FINISH

Place Deck Here

Place X Cards Here



name

name

18 X

x 7

x 9 = 54

 $8 \times 9 =$

12 x 9

| x 9 = 81

6 x | = 54

 $9 \times 10 =$

X

 $9 \times 4 =$

x 11 = 99

 $3 \times 9 =$

= 81 X

9 x 6

x 8 = 72

7 x 9

x 9



81

x 7 63

x 5

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X

9 x 7

x 12 = 108

8 x 9

12 x 9

x 9 = 81

= 63

9 x 10

9 x 4

= 99

3 x 9

6 x 9

x 9 = 63

x 11



72

x 6 54

x 7



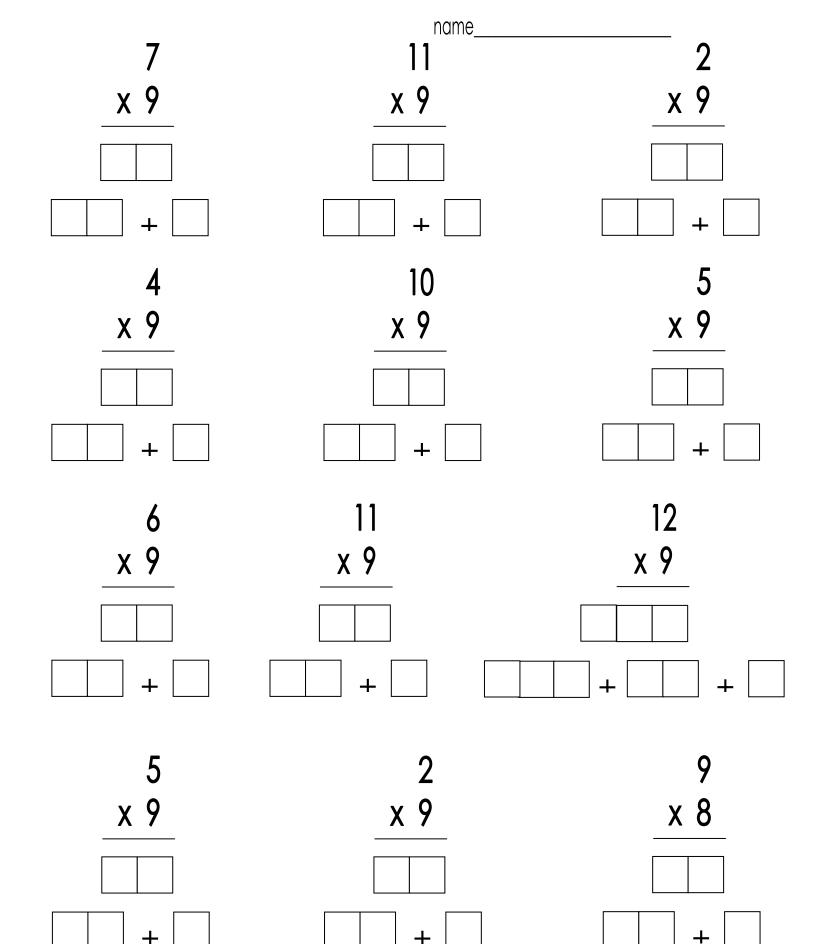


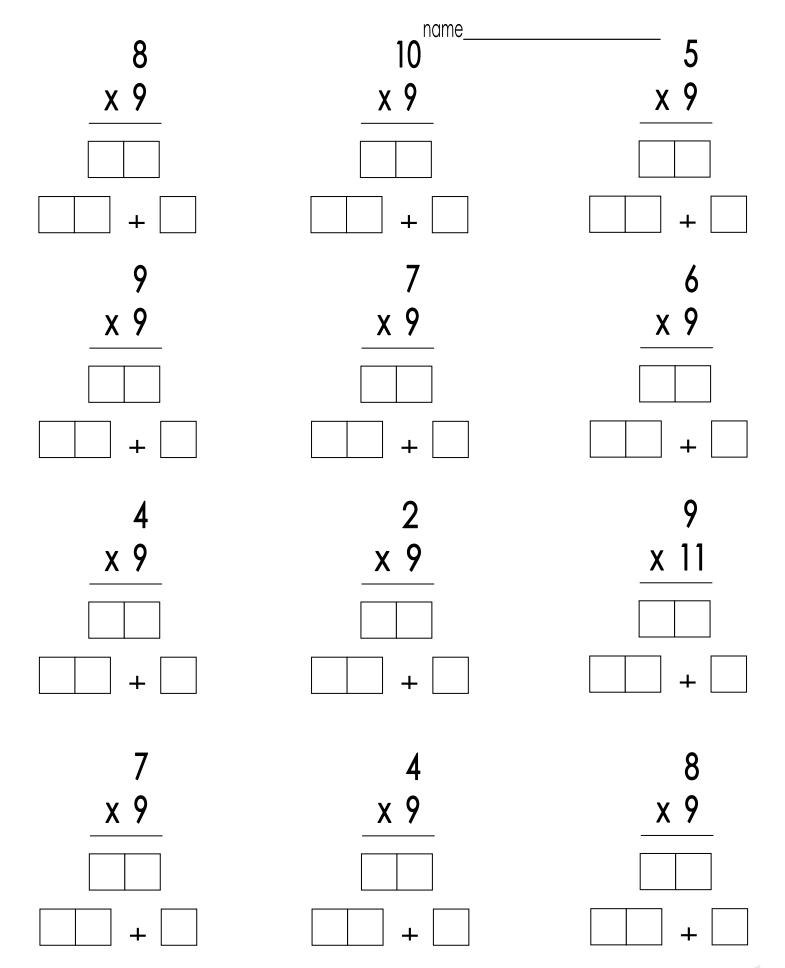
Multiplication Sentence	Repeated Addition Sentence
2 x 9 = 18	9 + 9 = 18
9 x 9 =	
8 x 9 =	
7 x 9 =	
9 x 11 =	
9 x 3 =	
3 x 9 =	
9 x 12 =	
9 x 10 =	

Repeat That? 9s version 1

name____

	1141110
Multiplication Sentence	Repeated Addition Sentence
9 x 9 = 81	9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = 81
6 x 9 =	
4 x 9 =	
1 x 9 =	
9 x 7 =	
9 x 5 =	
8 x 9 =	
3 x 9 =	
8 x 9 =	





name

5 x 9 9 x 4	9 x	2 9 x 6 9	x 7
	90		63
10 x 9 9 x 7	9 x	4 9 x 2 1 x 9 6	x 9
			81
9 x 5	7 x	9	9 x 9
			108
12 x 9 7 x 9	9 x	4 2 x 9 1 x 9 9	x 5

<u>81</u> ____ <u>72</u> ____ <u>18</u>

3 x 9 7 x 9 9 x 5 4 x 9

_____54 __72 _____99 __72 __45 ____

name

9 x 9		11 x 9		8 x 9

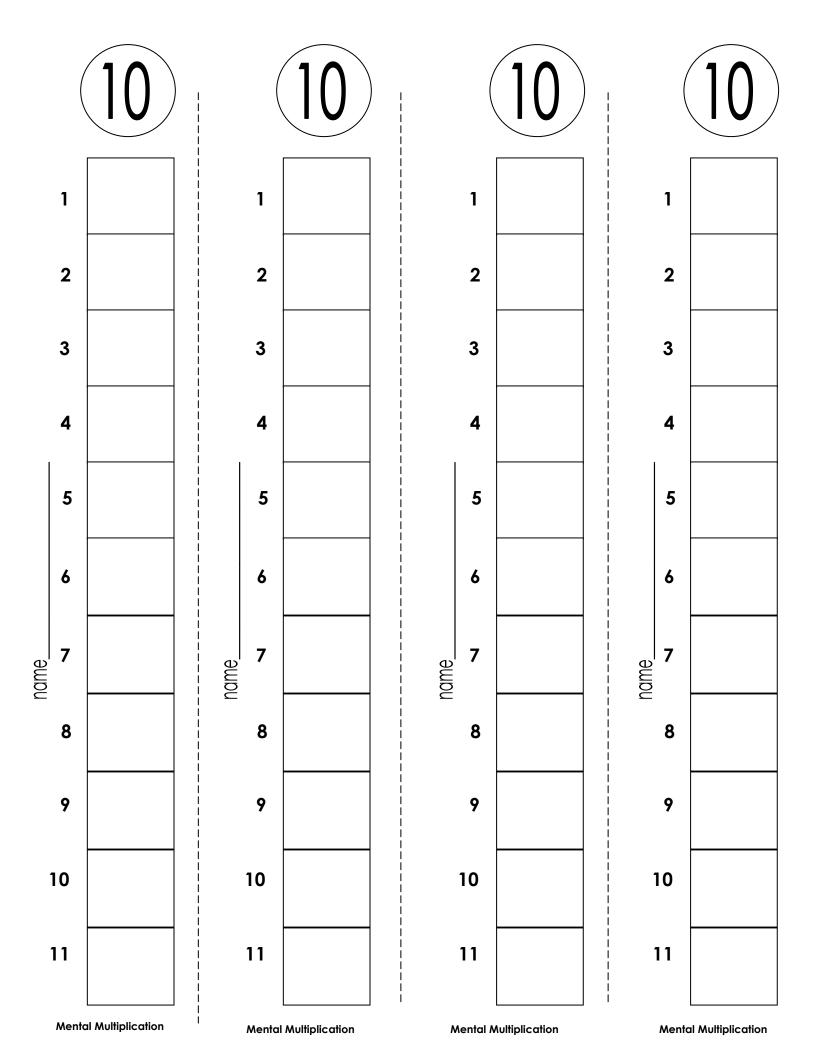
name_	

9 x 4 1 x 9	9 x 5	3 x 9	3 x 9
	27 18	108	63
9	81	7 x 9 8 x 9 9	9 x 6 90
9 x 9	8 90	45 72	108
12 x 9 4 45	x 9	3 x 9 9 x 2	54 63
2 x 9 45 5	3 x 9 9 x 4	99 63	9 x 8

SECTION MM







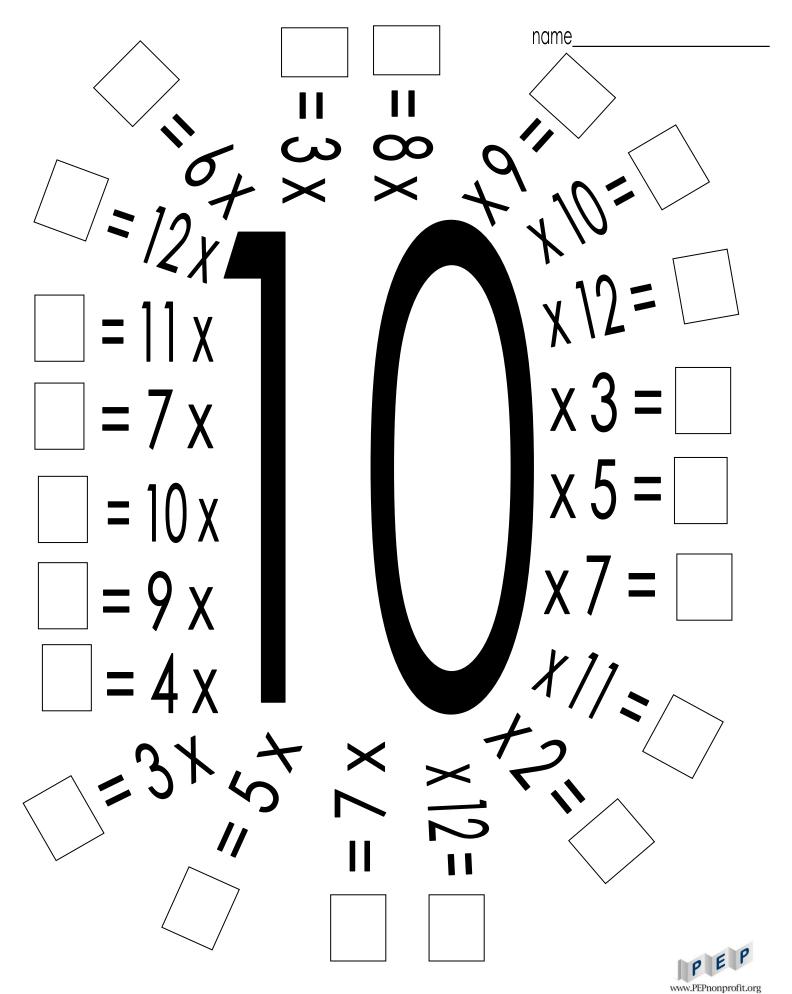
		<u> </u>	a <u>ctors 10s</u>		
10	20	30	40	50	60
1 x 10					
10 x 1				-	
2 x 5					
5 x 2				2	
70	90	90	100	110	120
70	80	70	100	110	120
				,	
				:	
PEP					
ww.PEPnonprofit.org		—			

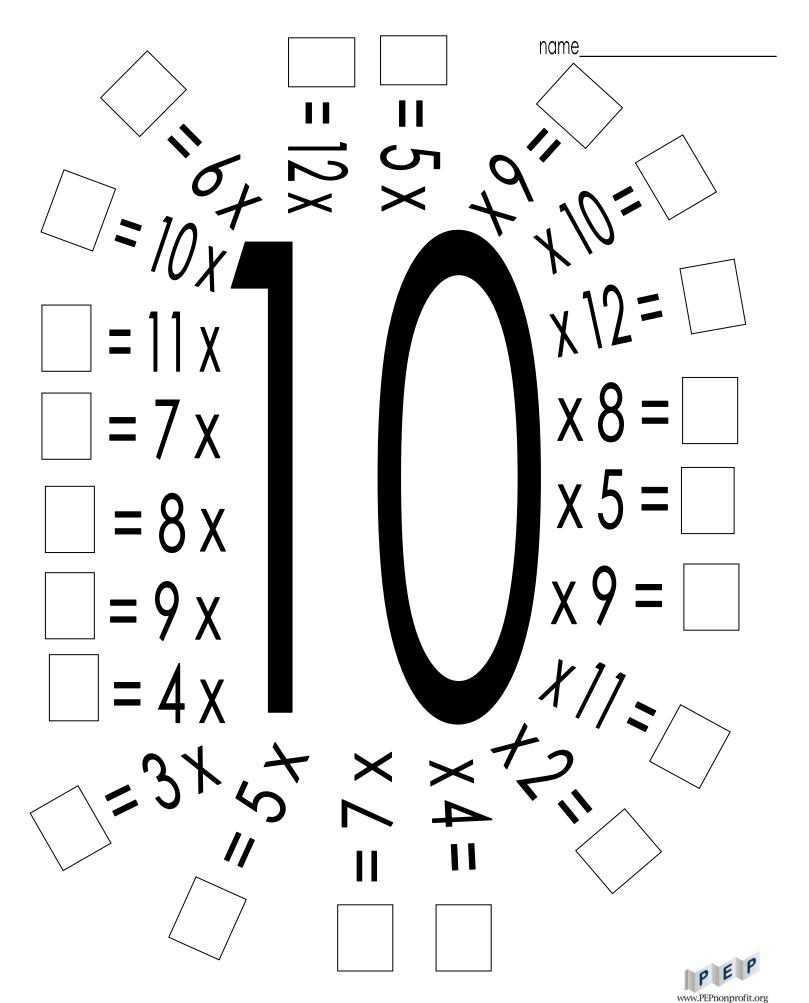
	20	2 x 10	thirty
	40	6 x 10	eighty
	70	8 x 10	twenty
	80	9 x 10	ninety
7	90	1 x 10	one hundred ten
10s version 1	110	3 x 10	ten
<u>\</u>	100	10 x 10	one hundred twenty
10s	120	10 x 11	sixty
	10	4 x 10	seventy
	30	10 x 12	forty
	50	7 x 10	fifty
	60	5 x 10	one hundred

Multiplication Match

	110	8 x 10	ninety
	30	9 x 10	forty
	70	2 x 10	one hundred twenty
	10	12 x 10	ten
2	120	1 x 10	seventy
ion	20	3 x 10	one hundred ten
10s version 2	90	11 x 10	twenty
0s \	50	10 x 10	sixty
J	40	10 x 6	one hundred
	100	4 x 10	thirty
	60	5 x 10	fifty
	80	7 x 10	eighty

Multiplication Match





Word Problem?	<u>Numeric Answer</u>
There are 10 blank CDs in each package. How	Complete Sentence Answer
many CDs are there in 3 packages?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each soccer ball costs \$10. How much would 6 soccer balls cost?	Complete Sentence Answer
300001 Dalls Cost +	<u>Visual Answer</u>

Word Problem ?	<u>Numeric Answer</u>
Rob has 8 packs of stickers. Each pack holds 10 stickers. How many	Complete Sentence Answer
total stickers does Rob have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
There are 2 printers in a box. How many in printers are there in 10	Complete Sentence Answer
boxes?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each child has 4 snacks. If there are 10 children, how many snacks are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

Word Problem ?	<u>Numeric Answer</u>
Mike read 5 stories. Each story has 10 pages. How many pages did Mike	Complete Sentence Answer
read?	<u>Visual Answer</u>



Word Problem?	<u>Numeric Answer</u>
Andrew buys 4 bags of peanuts. Each bag has 10 peanuts. How	Complete Sentence Answer
many peanuts does Andrew have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each student has 9 apples. How many apples do 10 students have?	Complete Sentence Answer
	<u>Visual Answer</u>

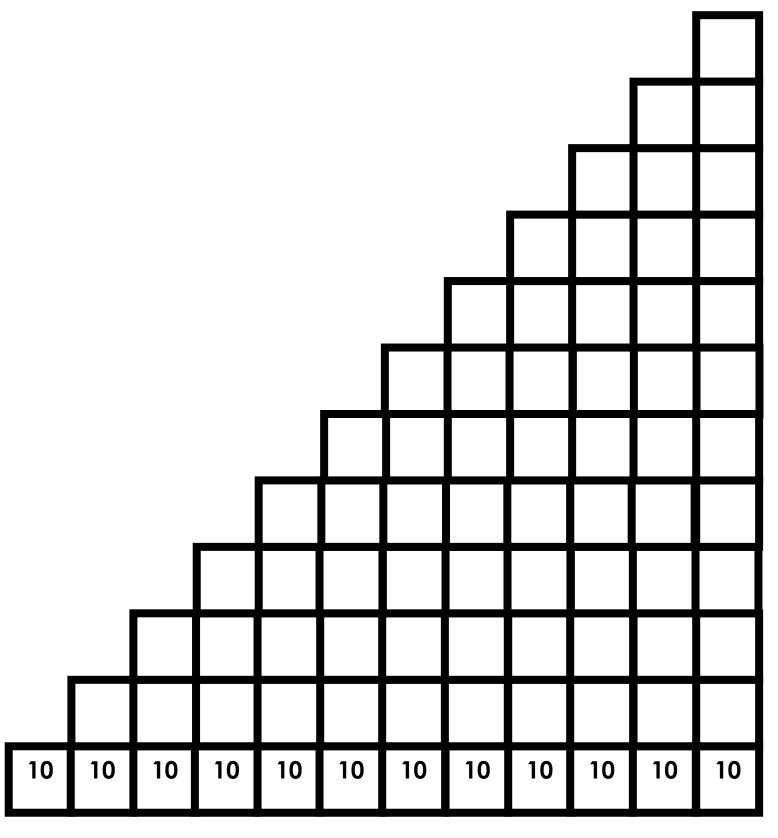
<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each boy has 10 rocks. If there are 9 boys, how many rocks are there in	Complete Sentence Answer
total?	<u>Visual Answer</u>

Word Problem?	Numeric Answer
There are 8 songs on a CD. How many songs are on 10 CDs?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Jill has 9 boxes of raisins. If each box has 10 raisins in it, how many raisins	Complete Sentence Answer
are there in total?	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Bobby buys 7 bags of glue sticks. Each bag has 10 glue	Complete Sentence Answer
sticks in it. How many glue sticks does Bobby have?	<u>Visual Answer</u>

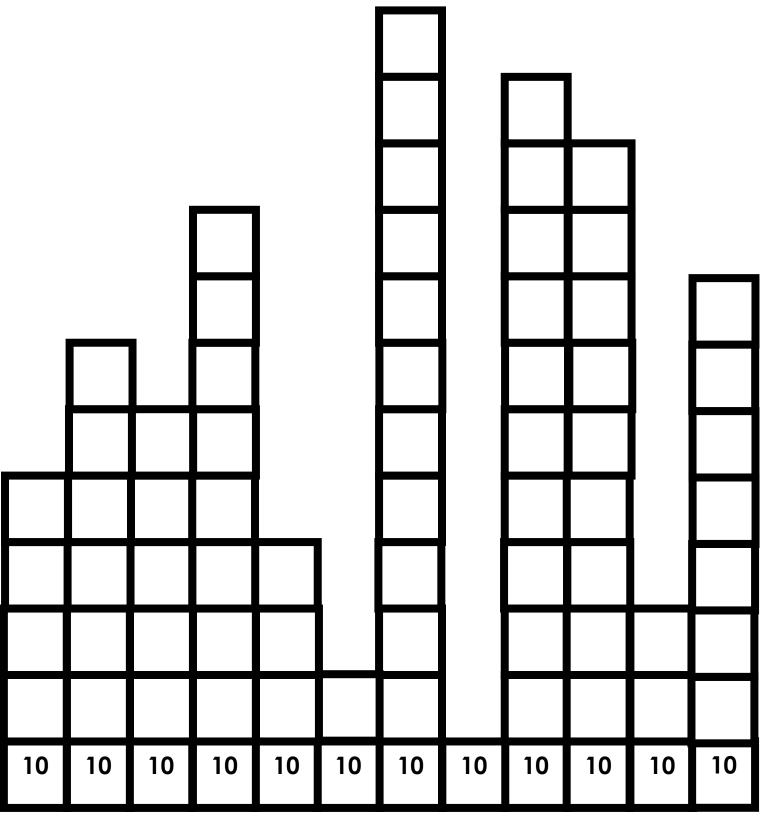
Stair Steps 10s version 1



	1x10	2x10	3x10	4x10	5x10	6x10	7x10	8x10	9x10	10x10	11x10	12x10
-												



Stair Steps 10s version 2



5x10	7x10	6x10	9x10	4x10	2x10	12x10	1x10	11x10	10x10	3x10	8x10
											l



3 x 10 = 30 3 x 10 = 3 x 10 =	x= x=	10 10 10 <u>x3 x3 x3</u>	<u>X X X</u>
5 x 10 = 50 5 x 10 = 5 x 10 =	x = x =	10 10 10 <u>x5</u> <u>x5</u> <u>x5</u>	<u>x x x</u>
7 x 10 = 70 7 x 10 = 7 x 10 =	x = x =	10 10 10 <u>x7 x7 x7</u>	<u>x x x</u>
10 x 9 = 90 10 x 9 = 10 x 9 =	x = x = x =	10 10 10 <u>x9 x9 x9</u>	<u>x x x</u>
11 x10= 110 11 x 10 = 11 x 10 =	x= x=	11 11 11 <u>x10 x10 x10</u>	<u>x x x</u>

	!	IIIIII	
4 x 10 = 40 4 x 10 = 4 x 10 =	x = x =	10 10 10 <u>x4</u> <u>x4</u> <u>x4</u>	<u>x x x</u>
6 x 10 = 60 6 x 10 = 6 x 10 =	x = x =	10 10 10 <u>x6</u> <u>x6</u> <u>x6</u>	<u>x x x</u>
8 x 10 = 80 8 x 10 = 8 x 10 =	x = x =	10 10 10 <u>x8 x8 x8</u>	<u>x x x</u>
10x10 = 100 10 x 10 = 10 x 10 =	x = x =	10 10 10 <u>x10 x10 x10</u>	<u>x x x</u>
12x10 = 120 12 x 10 = 12 x 10 =	x = x =	12 12 12 <u>x10</u> <u>x10</u> <u>x10</u>	<u>x x x</u>

10 x 3 = 30 10 x 3 = 10 x 3 =	x = x =	10 10 10 <u>x3 x3 x3</u>	<u>X X X</u>
10 x 5 = 50 10 x 5 = 10 x 5 =	x = x =	10 10 10 <u>x5</u> <u>x5</u> <u>x5</u>	<u>x x x</u>
$10 \times 7 = 70$ $10 \times 7 =$ $10 \times 7 =$	x = x =	10 10 10 <u>x7 x7 x7</u>	<u>x x x</u>
$10 \times 9 = 90$ $10 \times 9 =$ $10 \times 9 =$	x = x =	10 10 10 <u>x9 x9 x9</u>	<u>x x x</u>
10 x11= 110 10 x 11 = 10 x 11 =	x= x=	11 11 11 <u>x10</u> <u>x10</u> <u>x10</u>	<u>X X X</u>

10 x 4 = 40 10 x 4 = 10 x 4 =	x = x =	10 10 10 <u>x4</u> <u>x4</u> <u>x4</u>	<u>x x x</u>
10 x 6 = 60 10 x 6 = 10 x 6 =	x = x =	10 10 10 <u>x6 x6 x6</u>	<u>x x x</u>
10 x 8 = 80 10 x 8 = 10 x 8 =	x = x =	10 10 10 <u>x8 x8 x8</u>	<u>x x x</u>
10x10 = 100 10 x 10 = 10 x 10 =	x = x =	10 10 10 <u>x10 x10 x10</u>	<u>x x x</u>
10x12 = 120 10 x 12 = 10 x 12 =	x = x =	12 12 12 <u>x10</u> <u>x10</u> <u>x10</u>	<u>x x x</u>

Jack=10	Queen=11	King=12	Ace=1				
Multiply By 10							

	<u> </u>	Γ
START		
		FINISH

Place Deck Here

Place X Cards Here



name

name

10 x

$$x 10 = 60$$

$$x 10 = 90$$





$$\frac{x 7}{70}$$



$$x 10 = 90$$

$$x 10 = 70$$



$$\frac{x \cdot 6}{0}$$







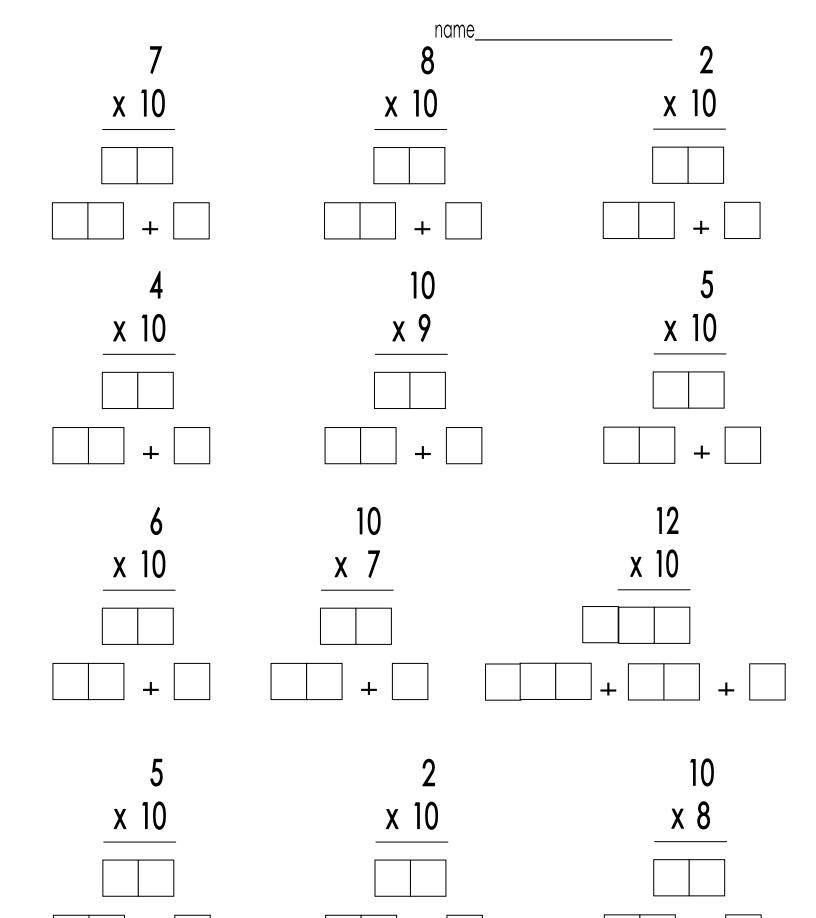
Multiplication Sentence	Repeated Addition Sentence
2 x 10 = 20	10 + 10 = 20
9 x 10 =	
8 x 10 =	
10 x 9 =	
10 x 11 =	
10 x 3 =	
3 x 10 =	
10 x 12 =	
10 x 10 =	

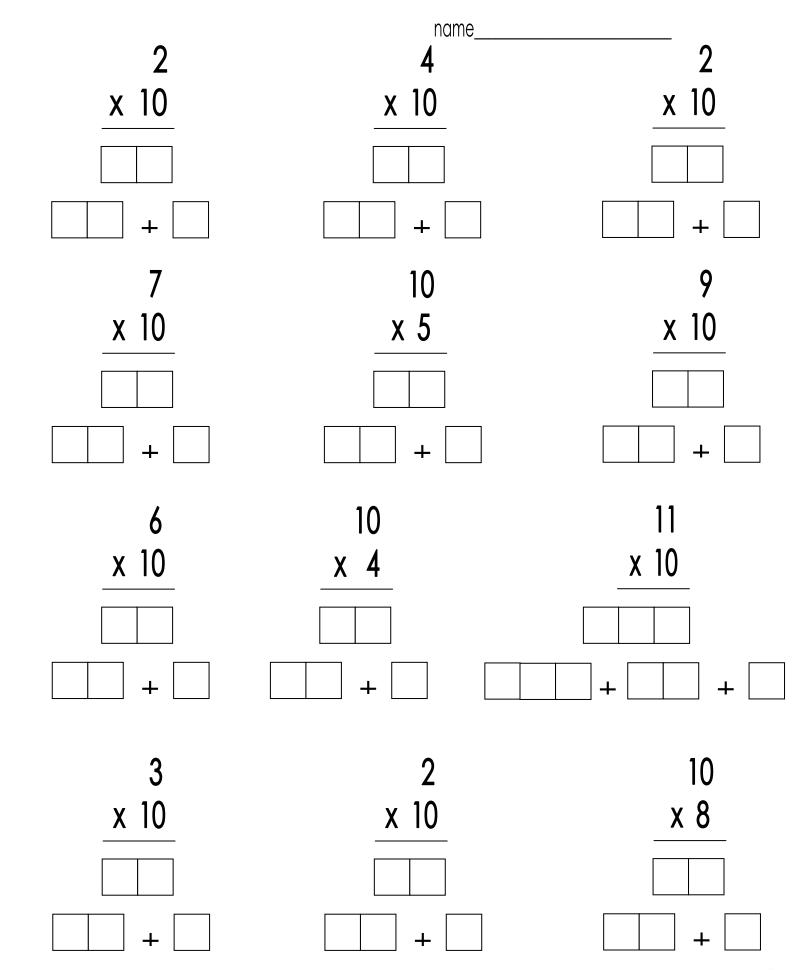
Repeat That? 10s version 1

name_____

Repeated Addition Sentence
9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 + 9 = 90







name			

5 x 10 10 x 4	10 x 2 10 x	6 10 x 7
	90	
10 x 9 10 x 7	10 x 4 10 x	2 10 x 9 6 x 10
10 x 5	7 x 10	9 x 10
	40 110	<u>90</u> <u>120</u>
10 x 3 10 x 9	10 x 4 2 x 1	0 10 x 9 10 x 5
3 x 10	7 x 10 10 x 5	4 x 10
5070	110	0 80 40

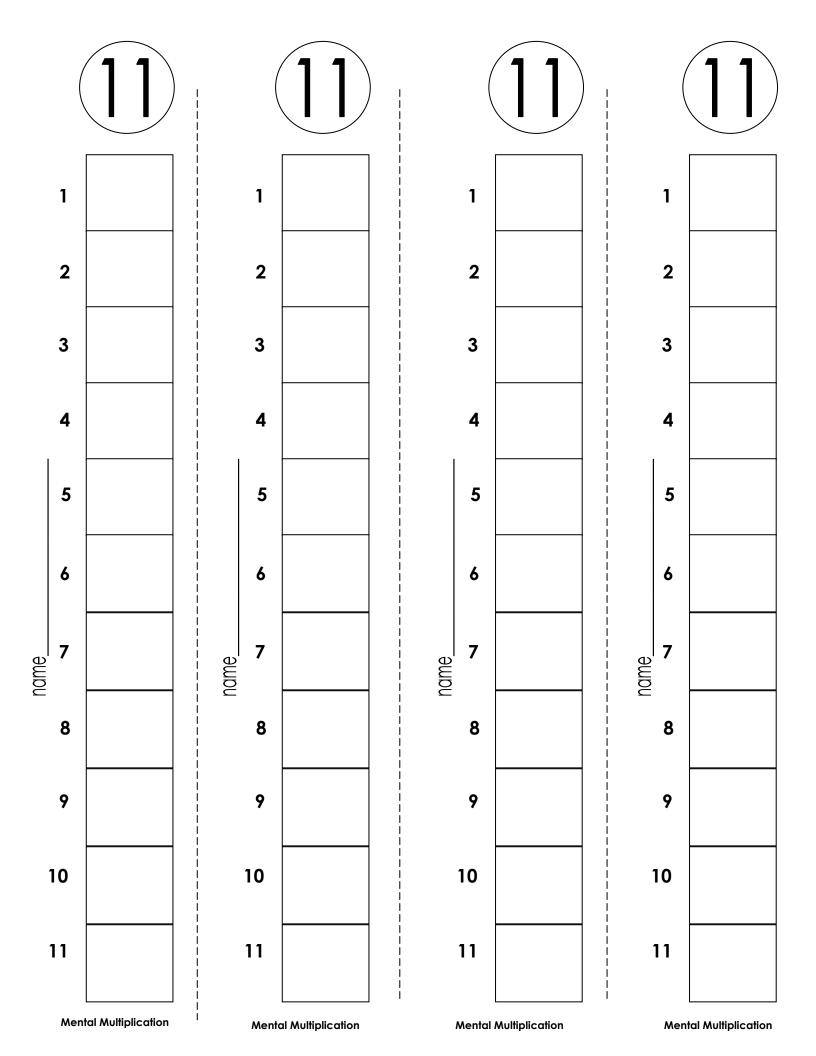
	name
6 x 10 10 x 2 10 x 4 10 x 9	
	<u>120</u> <u>80</u> <u>60</u>
10 x 9 10 x 2 10 x 4 10 x 5	10 x 7 6 x 10
<u>70</u> <u>100</u>	
10 x 3 4 x 10	9 x 10
	<u>10</u> <u>100</u>
10 x 7 10 x 4 10 x 6 3 x 10	10 x 8 10 x 3
80 90	
5 x 10 10 x 7	2 x 10
60 50 90 60	90 80

		name
2 x 10 10 x 8	10 x 2 10 x 2	2 10 x 8
10 x 9 10 x 1	10 x 2 10 x 4	4 10 x 9
90		
10 x 4	7 x 10	5 x 10
10030		90 70
10 x 3 10 x 2	10 x 4 6 x 10	0 10 x 2 10 x 5
3 x 10	7 x 10 10 x 6	9 x 10
30 40	100	80 70

SECTION MM







Find The Factors 11s

 11
 22
 33
 44
 55
 66

77	88	99	110	121	132

4.....



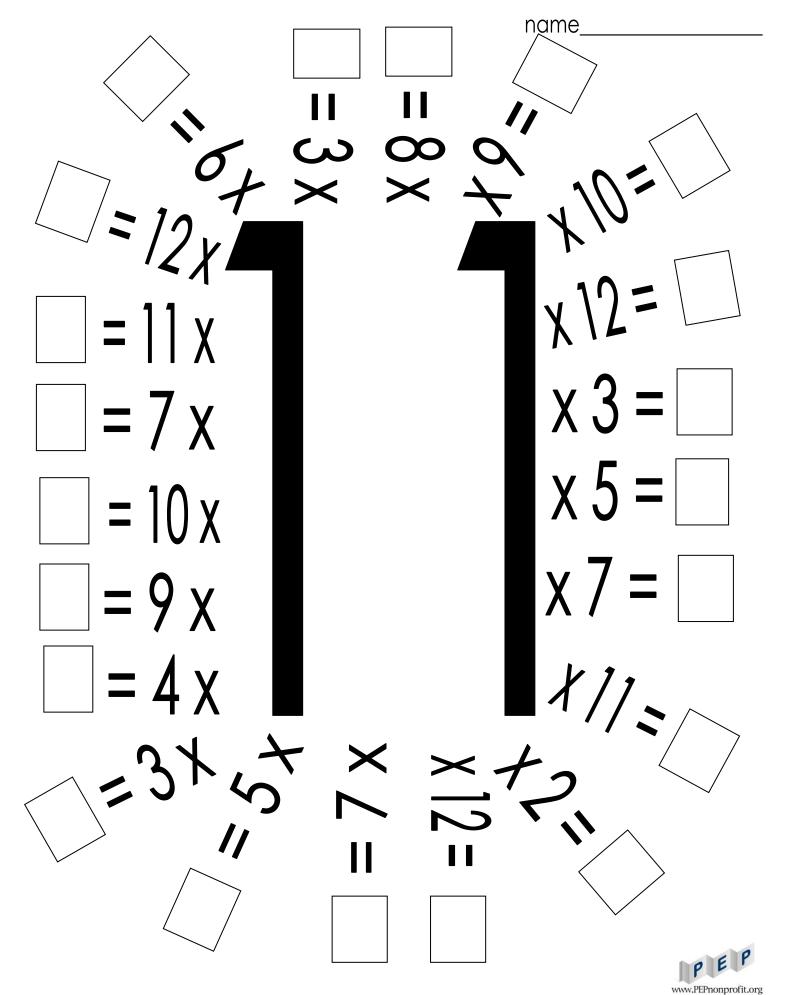
name

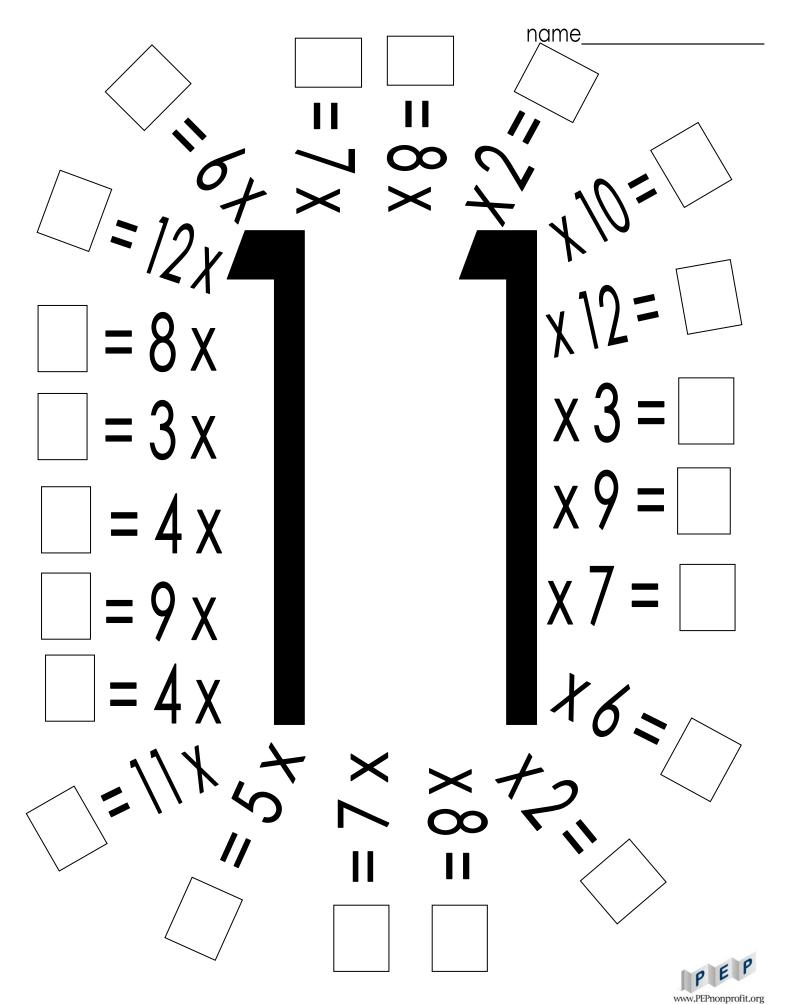
	22	2 x 11	thirty three
	44	6 x 11	eighty eight
	77	8 x 11	twenty two
	88	9 x 11	ninety nine
_ _	99	1 x 11	one hundred ten
11s version 1	121	3 x 11	eleven
s ve	110	11 x 10	one hundred thirty two
	132	11 x 11	sixty six
	11	4 x 11	seventy seven
	33	11 x 12	forty four
	55	7 x 11	fifty five
	66	5 x 11	one hundred twenty one

Multiplication Match

				1
	121	8 x 11	ninety nine	
	33	9 x 11	forty four	
	77	2 x 11 OI	ne hundred thirty two	
	11	12 x 11	eleven	
7	132	1 x 11	seventy seven	<u>idme</u>
	22	3 x 11	one hundred ten	KD
	99	11 x 11	twenty two	
2	55	10 x 11	sixty six	
	44	11 x 6 on	e hundred twenty one	
	110	4 x 11	thirty three	
	66	5 x 11	fifty five	
	88	7 x 11	eighty eight	

Multiplication Match





			nume
Word Problem?	<u>Numeric Answer</u>	Word Problem?	Numeric Answer
There are 5 letters in each envelope. How many letters are there in 11	Complete Sentence Answer	Each birthday card costs \$3. How much would 11 birthday cards	Complete Sentence Answer
envelopes?	<u>Visual Answer</u>	cost?	<u>Visual Answer</u>
<u>Word Problem</u> ?	<u>Numeric Answer</u>	<u>Word Problem</u> ?	Numeric Answer
Erin has 8 packs of stamps. Each pack holds 11 stamps. How many	Complete Sentence Answer	There are 2 pineapples in a box. How many in pineapples are	Complete Sentence Answer
total stamps does Erin have?	<u>Visual Answer</u>	there in 11 boxes?	<u>Visual Answer</u>
<u>Word Problem</u> ?	Numeric Answer	<u>Word Problem</u> ?	Numeric Answer
Each student has 4 crayons. If there are 11 children, how many crayons	Complete Sentence Answer	Cody read 5 poems. Each poem has 11 words in it. How many words did	Complete Sentence Answer
riow fridity crayons	Vieual Anguar	Cody read?	Vieual Anguar



Visual Answer

Visual Answer

are there in total?

Cody read?

Word Problem ?	<u>Numeric Answer</u>
Tony buys 10 packs of gum. Each pack has 11 pieces. How many	Complete Sentence Answer
pieces. The William, pieces of gum does Tony have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Each student has 9 pieces of paper. How many pieces of paper do 11	Complete Sentence Answer
students have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each boy has 11 medals. If there are 9 boys, how many medals are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
There are 4 stories in a book. How many stories are in 11 books?	Complete Sentence Answer
TT DOGNO.	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Eric has 12 boxes of tissue. If each box has 11 tissues in it, how many tissues	Complete Sentence Answer
are there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Jayden buys 2 bags of bread. Each bag has 11 slices of bread in it. How	Complete Sentence Answer
many slices of bread does Jayden have?	<u>Visual Answer</u>

name			

Stair Steps 11s version 1

									_		
							,				
					ı						
11	11	11	11	11	11	11	11	11	11	11	11

1x11	2x11	3x11	4x11	5x11	6x11	7x11	8x11	9x11	10x11	11x11	12x11



Stair Steps 11s version 2

5x11

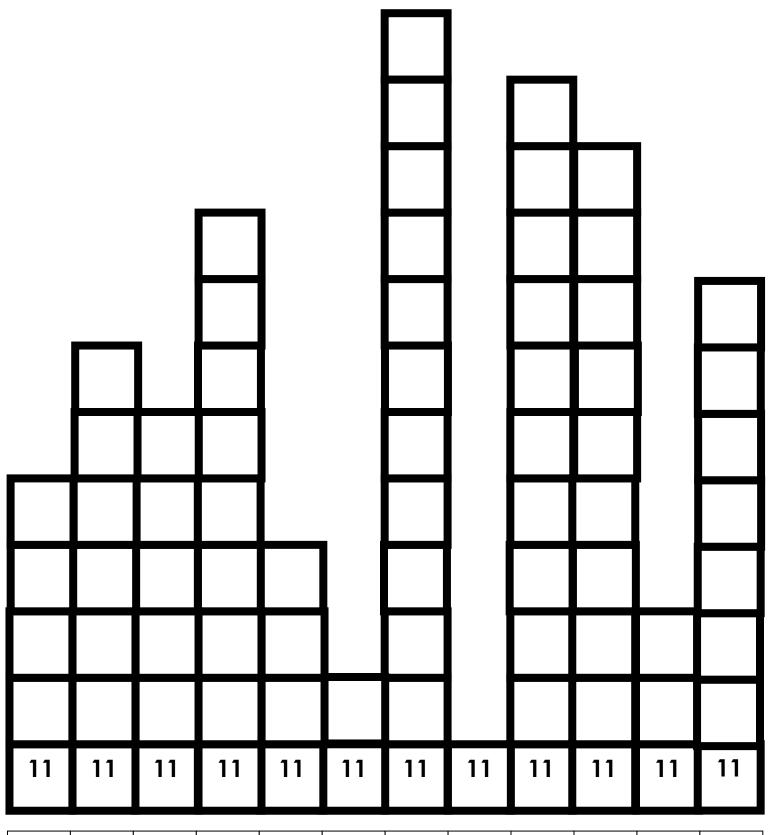
7x11

6x11

9x11

4x11

2x11



12x11

1x11

11x11

10x11



8x11

3x11

name_____

11 x 3 = 33 11 x 3 = 11 x 3 =	x =	11 11 11 <u>x3 x3 x3</u>	<u>x x x</u>
11 x 5 = 55 11 x 5 = 11 x 5 =	x = x = x =	11 11 11 <u>x5 x5 x5</u>	<u>x x x</u>
11 x 7 = 77 11 x 7 = 11 x 7 =	x = x =	11 11 11 <u>x7 x7 x7</u>	<u>x x x</u>
11 x 9 = 99 11 x 9 = 11 x 9 =	x = x = x =	11 11 11 <u>x9 x9 x9</u>	<u>x x x</u>
11 x11= 121 11 x 11 = 11 x 11 =	x = x =		<u>x x x</u>

		IUITI6	
11 x 4 = 44 11 x 4 =	x =	11 11 11	
11 x 4 =	x=	<u>x4</u> <u>x4</u> <u>x4</u>	<u>x x x</u>
11 x 6 = 66	x =		
11 x 6 =	x =	11 11 11	
11 x 6 =	x =	<u>x6 x6 x6</u>	<u> </u>
11 x 8 = 88	x =		
11 x 8 =	x=	11 11 11	
		<u>x8 x8 x8</u>	<u>x x x</u>
11 x 8 =	x=		
11x10 = 110	x=		
11 x 10 =	x=	10 10 10	
11 x 10 =	x =	<u>x11</u> <u>x11</u> <u>x11</u>	<u>x x x</u>
12x11 = 132	x=		
12 x 11 =	x=	12 12 12	
		<u>x11</u> x11 x11	<u>x x x</u>
12 x 11 =	_x_=		

	x = x =	11 11 11 <u>x3 x3 x3</u>	<u>x x x</u>
11 x 5 =	x = x = x =	11 11 11 <u>x5 x5 x5</u>	<u>x x x</u>
11 x 7 = 77 11 x 7 = 11 x 7 =	x = x =	11 11 11 <u>x7 x7 x7</u>	<u>x x x</u>
11 x 9 = 99 11 x 9 = 11 x 9 =	x= x=	11 11 11 <u>x9 x9 x9</u>	<u>x x x</u>
11 x11= 121 11 x 11 = 11 x 11 =	x = x =	11 11 <u>x11 x11</u> <u>x11</u>	<u>x x x</u>

11 x 4 = 44 11 x 4 = 11 x 4 =	x = x =	11 11 11 <u>x4 x4 x4</u>	<u>X X X</u>
11 x 6 = 66 11 x 6 = 11 x 6 =	x = x =	11 11 11 <u>x6 x6 x6</u>	<u>x x x</u>
11 x 8 = 88 11 x 8 = 11 x 8 =	x = x =	11 11 11 <u>x8 x8 x8</u>	<u>x x x</u>
11x10 = 110 11 x 10 = 11 x 10 =	x = x =	10 10 10 x11 x11 x11	<u>x x x</u>
11x12 = 120 11 x 12 = 11 x 12 =	x= x=	12 12 12 <u>x11</u> <u>x11</u> <u>x11</u>	<u>x x x</u>

52	FI	ip
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name____

Jack=10	Queen=11	King=12	Ace=1				
Multiply By 11							

START		
		FINISH

Place Deck Here

Place X Cards Here



name_____

name_____

11 x = 22

$$x 11 = 66$$

$$x 11 = 99$$



9

99



77





11 x = 33

$$x 11 = 77$$









name____

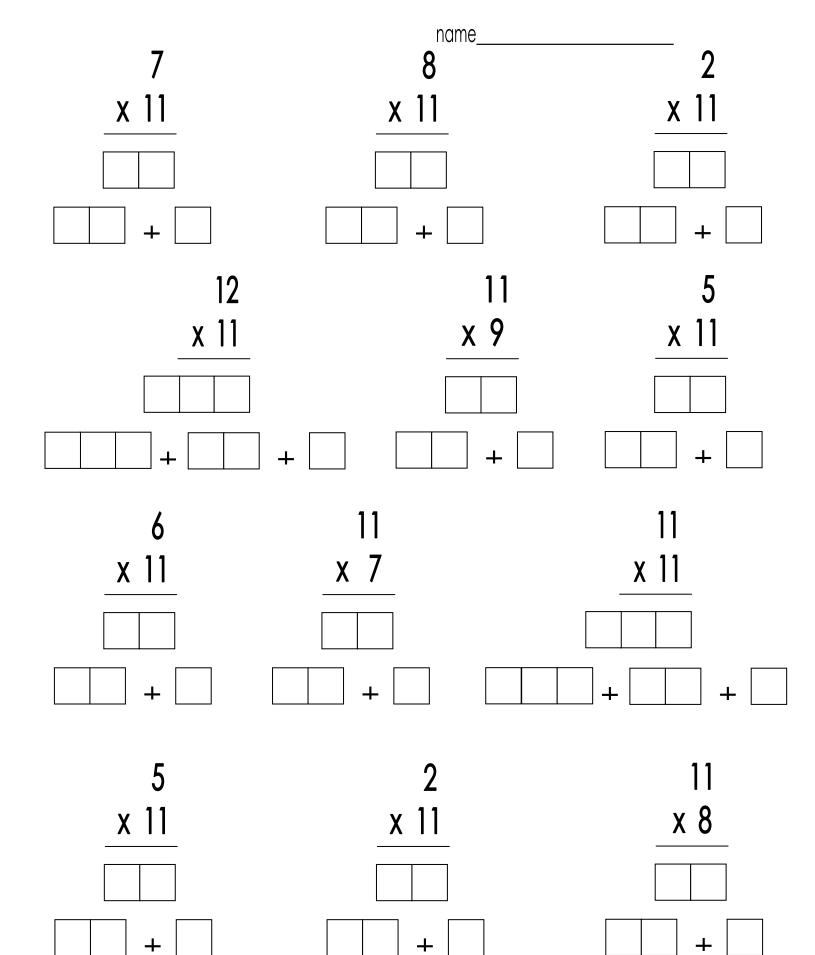
Multiplication Sentence	Repeated Addition Sentence
2 x 11 = 22	11 + 11 = 22
4 x 11 =	
8 x 11 =	
11 x 9 =	
10 x 11 =	
11 x 3 =	
3 x 11 =	
11 x 12 =	
1 x 11 =	

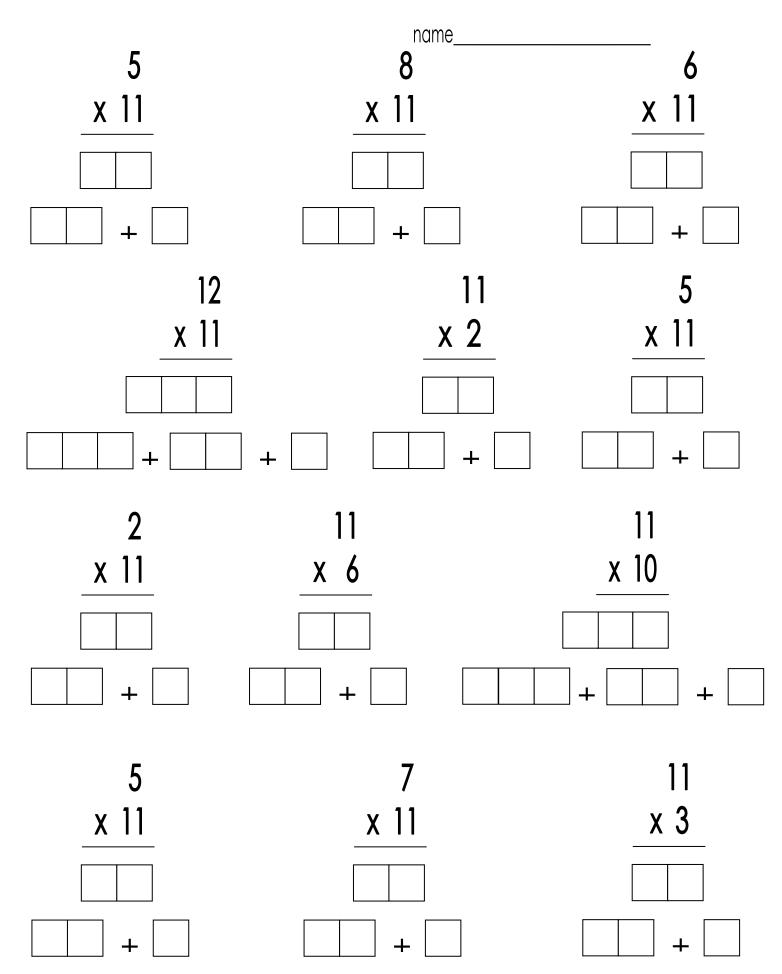
Repeat That? 11s version 1

name_____

Multiplication Sentence	Repeated Addition Sentence
11 x 9 = 99	9+9+9+9+9+9+9+9+9+9+9=99
6 x 11 =	
4 x 11 =	
1 x 11 =	
11 x 7 =	
11 x 5 =	
8 x 11 =	
3 x 11 =	
8 x 11 =	







11 x 9 = 11 x 5 = 12 x 11 = 12
$$\times$$

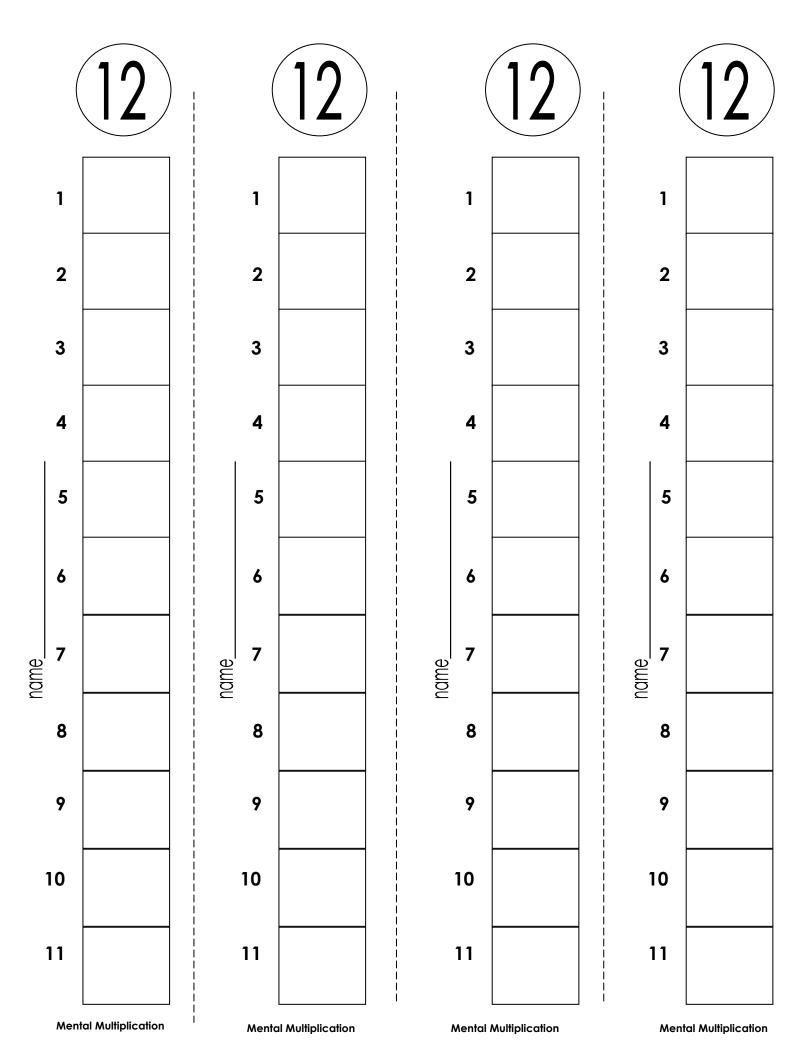
$$11 \times 11 = 9 \times 11 = 11 \times 4 = 11$$

		name	
5 x 11 11 x 4	11 x 2 11 x 6	11 x 7	
	99		66
11 x 9 11 x 7	11 x 4 11 x 2	11 x 9 6 x 11	
			99
11 x 5	7 x 11	9	x 11
		99121	
11 x 3 11 x 9	11 x 4 2 x 11	11 x 9 11 x 5	
			22
3 x 11	7 x 11 11 x 5		x 11
5577	132	8844	

		name	
8 x 11 11 x 6	11 x 4 11 x 6		
132	99	44 33	66
11 x 9 11 x 2	11 x 10 11 x 5	11 x 9 8 x 11	
			110
11 x 3	7 x 11		9 x 11
		88 121	
11 x 11 11 x 9	11 x 4 2 x 11	11 x 8 11 x 5	
	132		132
6 x 11	7 x 11 11 x 9		4 x 11

	name
4 x 11 11 x 3 11 x 6	
	<u>44</u> <u>88</u> <u>66</u>
11 x 9 11 x 2 11 x 12 11 x 3	11 x 9 4 x 11
99 66	
11 x 9 7 x 11 11 x 5	6 x 11
	<u>88</u> <u>121</u>
11 x 8 11 x 11 9 x 11	11 x 2 11 x 7
44 _ 132	
7 x 11 11 x 9	8 x 11
66 44 110 132	22 99

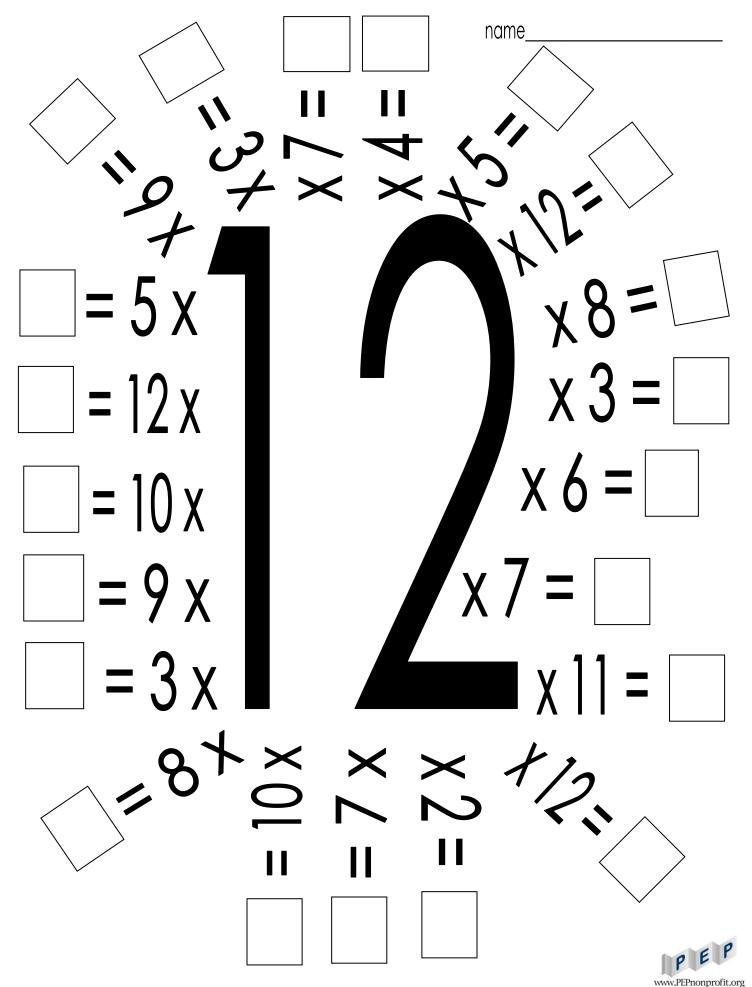
www.PEPnonprofit.org

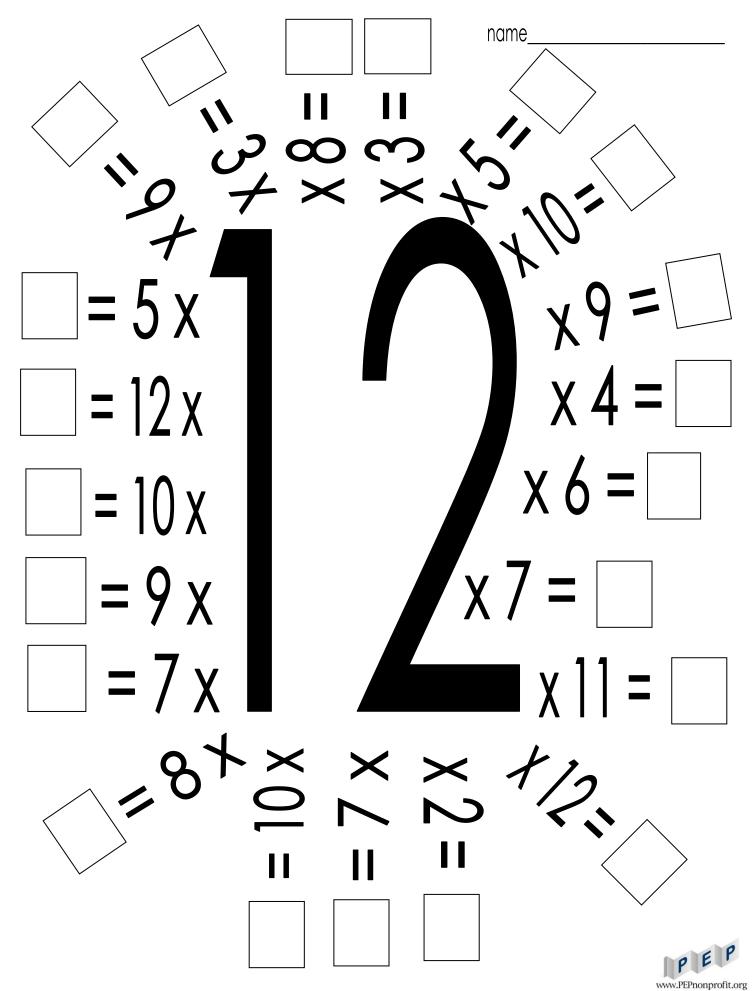


Multiplication Match

	132	1 x 12	thirty six
	36	9 x 12	ninety six
	84	2 x 12	twenty four
	12	12 x 12	one hundred eight
.7	144	8 x 12	one hundred twenty
2s version 2	24	5 x 12	twelve T
vers	108	7 x 12	one hundred forty four
72 \	60	10 x 12	seventy two
	48	12 x 6	eighty four
	120	4 x 12	forty eight
	72	3 x 12	sixty
	96	12 x 11	one hundred thirty two

Multiplication Match





name			

Word Problem?	<u>Numeric Answer</u>
There are 2 candy bars in each package. How many candy bars	Complete Sentence Answer
are there in 12 packages?	<u>Visual Answer</u>

Word Problem ?	Numeric Answer
Each book costs \$12. How much would 12 books cost?	Complete Sentence Answer
	<u>Visual Answer</u>

<u>Word Problem</u> ?	Numeric Answer
Luz has 8 packs of gum. Each pack holds 12 pieces. How many total	Complete Sentence Answer
pieces of gum does Luz have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 11 chess pieces in a set. How many in chess pieces are there in	Complete Sentence Answer
12 sets?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each student has 4 different math problems. If there are 12 children,	Complete Sentence Answer
how many math problems are there in total?	<u>Visual Answer</u>

Word Problem?	<u>Numeric Answer</u>
Billy read 6 novels. Each novel has 12 short stories in it. How many short	Complete Sentence Answer
stories did Billy read?	<u>Visual Answer</u>



<u>Word Problem</u> ?	<u>Numeric Answer</u>
Ted buys 10 bags of potatoes. Each bag has 12 potatoes. How	Complete Sentence Answer
many potatoes does Ted have?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Each student has 3 pens. How many pens do 12 students have?	Complete Sentence Answer
	<u>Visual Answer</u>

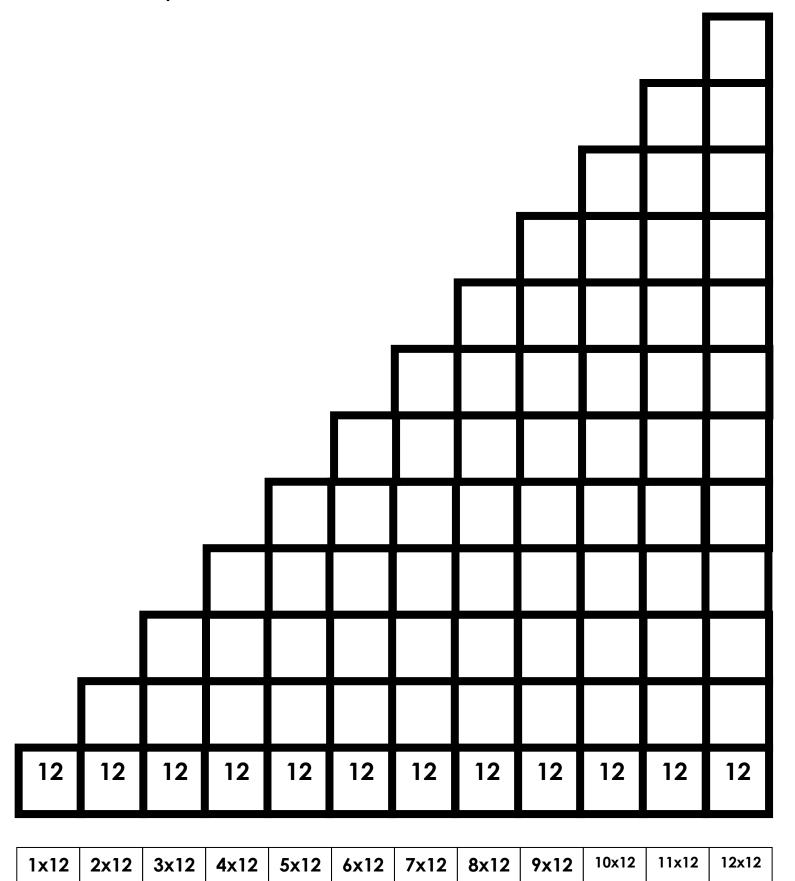
Word Problem?	<u>Numeric Answer</u>
Each boy has 12 trophies. If there are 9 boys, how many trophies are	Complete Sentence Answer
there in total?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
There are 4 families in an apartment building. How many families are	Complete Sentence Answer
in 12 apartment buildings?	<u>Visual Answer</u>

<u>Word Problem</u> ?	<u>Numeric Answer</u>
Kyle has 12 boxes of shoes. If each box has 2 shoes in it, how many shoes	Complete Sentence Answer
are there in total?	<u>Visual Answer</u>

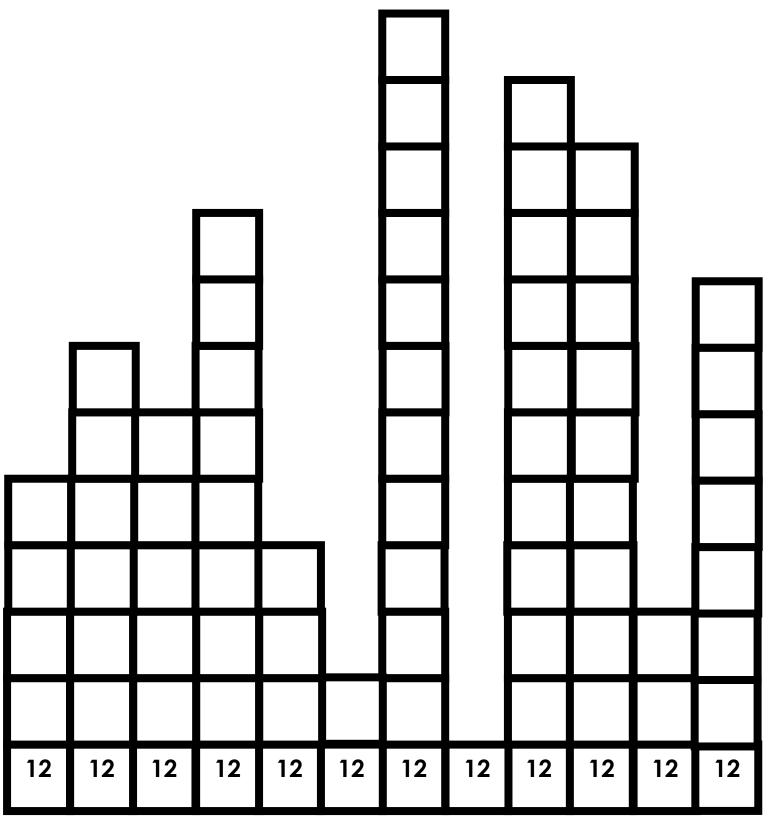
<u>Word Problem</u> ?	<u>Numeric Answer</u>
Kathy buys 5 bags of peanuts. Each bag has 12 peanuts in it. How many	Complete Sentence Answer
peanuts does Kathy have?	<u>Visual Answer</u>

Stair Steps 12s version 1





Stair Steps 12s version 2



5x12	7x12	6x12	9x12	4x12	2x12	12x12	1x12	11x12	10x12	3x12	8x12



12 x 3 = 36 12 x 3 = 12 x 3 =	x = x =	12 12 12 <u>x3</u> <u>x3</u> <u>x3</u>	<u>x x x</u>
$12 \times 5 = 60$ $12 \times 5 =$ $12 \times 5 =$	x = x =	12 12 12 <u>x5</u> <u>x5</u> <u>x5</u>	<u>x x x</u>
12 x 7 = 84 12 x 7 = 12 x 7 =	x = x = x =	12 12 12 <u>x7 x7</u> <u>x7</u>	<u>x x x</u>
$12 \times 9 = 108$ $12 \times 9 =$ $12 \times 9 =$	x = x =	12 12 12 <u>x9 x9 x9</u>	<u>x x x</u>
11 x12= 132 11 x 12 = 11 x 12 =	x= x=	12 12 12 <u>x11 x11 x11</u>	<u>X X X</u>

		name	
12 x 4 = 48 12 x 4 = 12 x 4 =	x = x =	12 12 12 <u>x4</u> <u>x4</u> <u>x4</u>	<u>x x x</u>
12 x 6 = 72 12 x 6 = 12 x 6 =	x = x =	12 12 12 <u>x6 x6</u> <u>x6</u>	<u>x x x</u>
12 x 8 = 96 12 x 8 = 12 x 8 =	x = x =	12 12 12 <u>x8 x8</u> <u>x8</u>	<u>x x x</u>
10x12 = 120 10 x 12 = 10 x 12 =	x = x =	10 10 10 x12 x12 x12	<u>x x x</u>
12x11 = 144 12 x 11 = 12 x 11 =	x = x =	12 12 12 <u>x12 x12 x12</u>	<u>x x x</u>

12 x 3 = 36 12 x 3 = 12 x 3 =	x = x =	12 12 12 <u>x3 x3 x3</u>	<u>x x x</u>
12 x 5 = 60 12 x 5 = 12 x 5 =	x = x =	12 12 12 <u>x5</u> <u>x5</u> <u>x5</u>	<u>x x x</u>
12 x 7 = 84 12 x 7 = 12 x 7 =	x = x =	12 12 12 <u>x7 x7 x7</u>	<u>x x x</u>
12 x 9 = 108 12 x 9 = 12 x 9 =	x = x =	12 12 12 <u>x9 x9 x9</u>	<u>x x x</u>
12 x 11 = 132 12 x 11 = 12 x 11 =	x = x =	12 12 12 <u>x11 x11 x11</u>	<u>x x x</u>

		I G I G	
12 x 4 = 48 12 x 4 = 12 x 4 =	x = x =	12 12 12 <u>x4 x4 x4</u>	<u>x x x</u>
12 x 6 = 72	x =		
12 x 6 =	x =	12 12 12 v6 v6 v6	V V V
12 x 6 =	x =	<u>x6 x6 x6</u>	
12 x 8 = 96	x=		
12 x 8 =	x =	12 12 12 <u>x8 x8 x8</u>	Y Y Y
12 x 8 =	_x_=	<u> </u>	
12x10 = 120	x =		
12 x 10 =	x =	10 10 10 <u>x12</u> <u>x12</u> <u>x12</u>	V V V
12 x 10 =	x =	<u> </u>	
12x12 = 144	x=		
12 x 12 =	x =	12 12 12 <u>x12 x12 x12</u>	V V
12 x 12 =	x =	<u> </u>	<u>x x x</u>

name_____

Jack=10	Queen=11	King=12	Ace=1		
Multiply By 12					

START		
		FINISH

е
E

Place X Cards Here



name_____

12 x = 24

12 x 7 =

8 x 12 =

12 x 11 =

x 12 = 108

6 x = 72

9 x 12 =

12 x = 24

12 x 4 =

 \times 12 = 144

3 x 12 =

12 x = 108

12 x 6 =

7 x 12 =

8

x 12



9

X

108

 $\frac{x 7}{84}$

12

x 5



12 x = 36

12 x 7 =

8 x 12 =

12 x 12 =

x 12 = 108

12 x = 84

12 x 10 =

12 x = 96

12 x 4 =

3 x 12 =

12 x = 132

6 x 12 =

x 12 = 84

10 x 12 =

10

x 12

12

X

108

 $\frac{x 6}{72}$

12

x 7





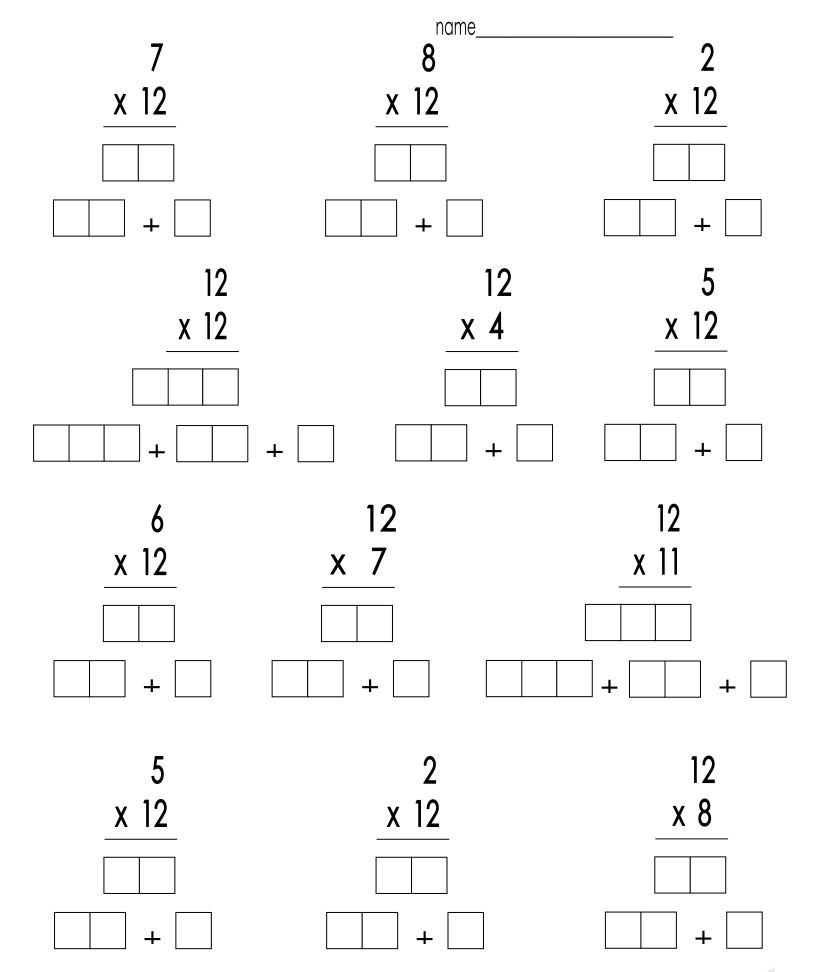


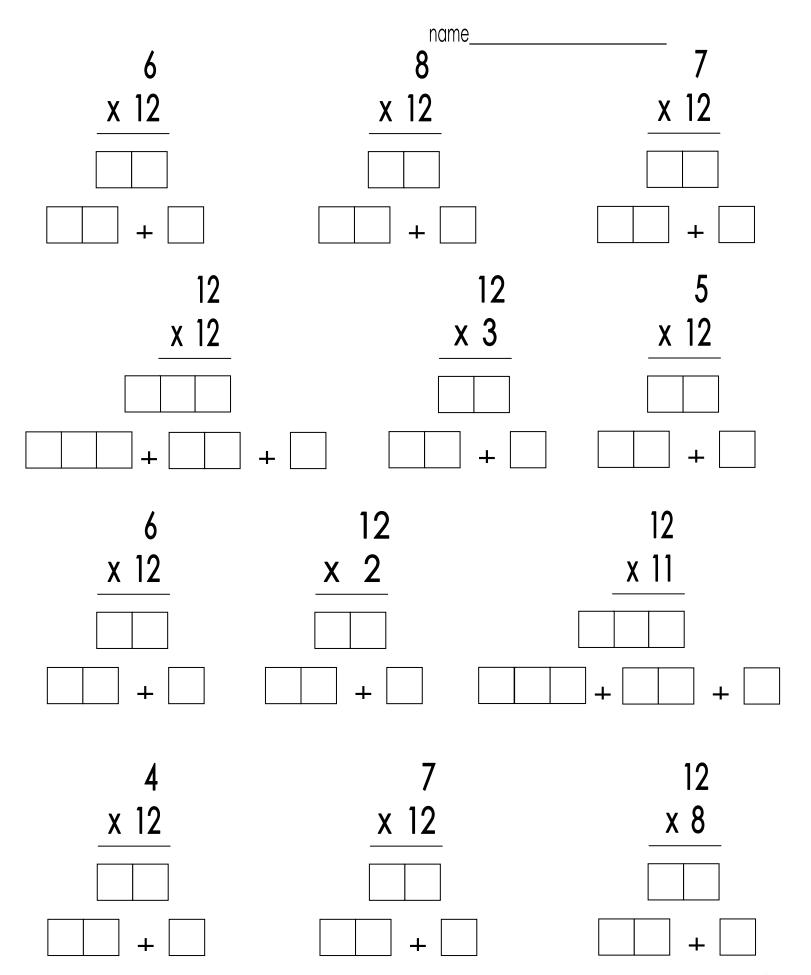
Multiplication Sentence	Repeated Addition Sentence
2 x 12 = 24	12 + 12 = 24
4 x 12 =	
8 x 12 =	
12 x 9 =	
10 x 12 =	
12 x 3 =	
3 x 12 =	
12 x 12 =	
1 x 12 =	

Repeat That? 12s version 1

name____

Multiplication Sentence	Repeated Addition Sentence
12 x 9 = 108	9+9+9+9+9+9+9+9+9+9+9+9=108
6 x 12 =	
4 x 12 =	
1 x 12 =	
12 x 7 =	
12 x 5 =	
8 x 12 =	
3 x 12 =	
8 x 12 =	





		name
8 x 12 12 x 6	12 x 4 12 x 6	
	108	<u>48</u> <u>36</u> <u>72</u>
12 x 9 12 x 2	11 x 12 12 x 5	12 x 9 8 x 12
12 x 3	7 x 12	9 x 12
2460		96 132
12 x 12 12 x 9	12 x 4 2 x 12	12 x 8 12 x 5
	132	
6 x 12	7 x 12 12 x 9	4 x 12
48 84	132	36 48

	name
3 x 12	
14412	<u>48</u> <u>36</u> <u>96</u>
12 x 9 12 x 5 11 x 12 12 x 2	12 x 9 4 x 12
<u>72</u> <u>12</u>	
12 x 6 7 x 12 7 x 12	9 x 12
	96 108
12 x 12 12 x 9 12 x 3 2 x 12	12 x 6 12 x 5
7 x 12 12 x 9	2 x 12
12 48 96 132	36 48

	name
	12 x 4 12 x 6 7 x 12 7 x 12 72
12 x 9 12 x 3 36	11 x 12
12 x 3	7 x 12 9 9 132
	12x6 2x12 12x8 12x5
5 x 12	12 x 4

Put It All Together ANSWER KEYS



name_			

16

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12 10 8 24 10 2 6

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10 x 2 2×3 2×7 5 x 2 2 x 8 2 x 2 1 x 2 9 x 2 6 x 2

20 14 10 16 2 12 18 4

2 x 10 2 x 4 7 x 2 11 x 2 9 x 2 2×5 3 x 2 2×7 2 x 9

8 22 20 18 14 10 14 18 6

10 x 2 2×3 2×7 5 x 2 8 x 2 2 x 2 1 x 2 2 x 9 6 x 2

20 14

10

2 x 6 2×4 2×3 2 x 8 5 x 2 2 x 12 2 x 8 11 x 2 2×4

12 8 6 16 10 24 16 22 8



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5 x 2

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6 x 3 2×3 3 x 11 3 x 2 8 x 3 3×7 10 x 3 2×3 8 x 3 18 33 24 6 21 24 30 6 6

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3 x 9 3 x 4 3 x 8 10 x 3 11 x 3 3 x 11 3×5 3 x 8 4 x 3 27 12 24 30 33 33 15 12 24

3 x 6 12 x 3 3 x 8 4 x 3 4 x 3 3 x 8 7 x 3 6 x 3 3 x 6 18 36 24 12 24 21 12 18 18

2 x 3 3 x 4 3 x 10 3 x 8 5 x 3 3 x 8 3 x 10 11 x 3 3 x 9

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3 x 4 11 x 3 3 x 10 8 x 3 5 x 3 3 x 7 9 x 3 6 x 3 11 x 3

<u>12</u> <u>33</u> <u>30</u> <u>24</u> <u>15</u> <u>21</u> <u>27</u> <u>18</u> <u>33</u>

3 x 9 3 x 3 2 x 3 4 x 3 11 x 3 7 x 3 3 x 5 3 x 4 3 x 4

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<u>30 36 15 24 24 12 6 21 12</u>

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6 21 18 12 15 24 21 18 9



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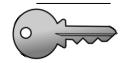
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2 x 4 6 x 4 11 x 4 4 x 6 4 x 2 4 x 7 2 x 4 8 x 4 4 x 10

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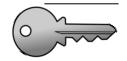
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5 x 4 6 x 5	5 x 11	5 x 6	5 x 2	5 x 7	5 x 2	8 x 5	8 x 5
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7 x 6

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1 x 6

6 x 5

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6 x 5

12 x 6

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12 x 6

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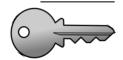
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6 66 72 30 54 6 18 42 60

54 72 54 24 66 60 24 66 48

42 72 48 18 18 48 42 36 36

<u>12</u> <u>6</u> <u>48</u> <u>48</u> <u>24</u> <u>36</u> <u>54</u> <u>72</u> <u>54</u>

36

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24 6 30 18 30 18 6

<u>12</u> <u>66</u> <u>60</u> <u>36</u> <u>24</u> <u>42</u> <u>54</u> <u>36</u> <u>42</u>

54 18 12 60 66 36 24 72 24

48 72 24 24 48 18 12 60 66

12 42 48 18 24 54 54 18 18

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$$|7 \times 10|$$
 $|12 \times 7|$ $|7 \times 7|$ $|6 \times 7|$ $|7 \times 4|$ $|2 \times 7|$ $|1 \times 7|$ $|7 \times 5|$ $|2 \times 7|$

 3×7 7 x 5 7×7 3×7 7 x 8 11 x 7 5×7 3 x 7 12 x 7



name

42

7 x 2 7 x 4 6 x 7 12 x 7 6 x 7 2×7 6 x 7 8 x 7 7×7

28 42 84 42 42 14 49 14 56

11 x 7 1 x 7 7 x 12 5 x 7 9 x 7 7 x 1 9 x 7 7 x 6 7 x 10

77 84 7 35 63 42 63 70

11 x 7 7 x 9 8 x 7 11 x 7 8 x 7 10 x 7 3×7 7 x 8 4 x 7

63 77 56 56 77 70 21 28 56

12 x 7 7 x 3

6 x 7 7 x 8 7 x 8 4 x 7 7×7 7×7 6 x 7

21

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 2×7 1 x 7 7 x 4 7 x 7 7 x 8 5 x 7 7 x 10 8 x 7 7 x 9

14 7 49 28 56 35 56 70 63



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49 84 28 21 56 21 14 70 63

14 42 49 21 28 84 56 14 21



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5 x 8 8 x 4	8 x 9	8 x 5	8 x 2	8 x 6	8 x 2	8 x 7	8 x 8
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40 32 72 40 16 48 16 56 64

3 x 8 10 x 8 8 x 7 8 x 4 8 x 4 8 x 2 1 x 8 6 x 8 7 x 8

<u>24</u> <u>80</u> <u>56</u> <u>32</u> <u>32</u> <u>16</u> <u>8</u> <u>48</u> <u>56</u>

8 x 5 | 8 x 6 | 8 x 3 | 4 x 8 | 7 x 8 | 8 x 11 | 8 x 6 | 8 x 12 | 8 x 9

40 48 24 32 56 88 48 96 72

8 x 10 | 12 x 8 | 7 x 8 | 8 x 4 | 8 x 4 | 2 x 8 | 1 x 8 | 8 x 5 | 8 x 2

80 96 56 32 32 16 8 40 16

 3x8
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24 56 64 56 40 88 72 40 32



name		

8 x 4	6 x 8	12 x 8	8 x 5	8 x 2	6 x 8	8 x 2	8 x 7	8 x 6
	48	96	40	<u> 16 </u>	48_	16	56_	48





56

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64

8 x 4	1 x 8	4 x 8	2 x 8	8 x 5	3 x 8	1 x 8	8 x 8	8 x 7

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8 x 6 | 12 x 8 | 4 x 8 | 8 x 3 | 8 x 8 | 3 x 8 | 8 x 2 | 10 x 8 | 8 x 8

48 96 32 24 64 24 16 80 64

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9 x 3

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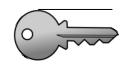
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name

36 54 99 45 18 54 18 63 45

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81 72 63 54 99 90 36 27 72

<u>45</u> <u>108</u> <u>63</u> <u>72</u> <u>27</u> <u>72</u> <u>27</u> <u>54</u> <u>108</u>

18 9 99 63 36 36 54 81 72



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9 x 4	1 x 9	3 x 9	2 x 9	9 x 5	3 x 9	12 x 9	8 x 9	9 x 7
36	9		18	45	27	108		63
1 x 9	11 x 9	9 x 10	9 y 9	9 x 4	7 v 9	8 v 0	Q v 6	9 x 10





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5 x 10	10 x 4	7 x 10	9 x 10	10 x 2	10 x 6	2 x 10	10 x 7	6 x 10	
50	40	70	90	20	60	20	70	60	

$$\begin{bmatrix} 3 \times 10 \end{bmatrix} \begin{bmatrix} 5 \times 10 \end{bmatrix} \begin{bmatrix} 7 \times 10 \end{bmatrix} \begin{bmatrix} 7 \times 10 \end{bmatrix} \begin{bmatrix} 10 \times 5 \end{bmatrix} \begin{bmatrix} 11 \times 10 \end{bmatrix} \begin{bmatrix} 8 \times 10 \end{bmatrix} \begin{bmatrix} 4 \times 10 \end{bmatrix} \begin{bmatrix} 4 \times 10 \end{bmatrix}$$





60 20 70 100 40 90 120 80 60

70 90 20 100 40 50 70 60 90

30 70 110 40 40 120 10 100 90

80 70 40 90 60 30 80 30 80

60 50 90 50 70 60 90 80 20





name	!		

2 x 10	10 x 8	8 x 10	10 x 10	10 x 2	10 x 2	2 x 10	10 x 8	7 x 10
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3 x 10	3 x 10	4 x 10	7 x 10	10 x 6	10 x 10	8 x 10	7 x 10	9 x 10





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33 99 77 44 44 22 99 66 99

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88 33 99 66 44 22 99 55 22

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9 x 11 | 11 x 9 | 11 x 2 | 6 x 11 | 11 x 12 | 11 x 3 | 11 x 9 | 4 x 11 | 11 x 10

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11 x 9 2 x 11 4 x 11 4 x 11 7 x 11 11 x 5 8 x 11 11 x 11 6 x 11

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66 44 110 77 99 132 22 99 88

96 72 132 108 48 72 48 36 72

60 108 24 12 121 60 108 96 144

36 24 60 72 84 120 96 132 108

72 24 108 132 48 24 96 60 120

6 x 12 | 4 x 12 | 7 x 12 | 7 x 12 | 12 x 9 | 12 x 11 | 3 x 12 | 4 x 12 | 4 x 12

72 48 84 84 108 132 36 48 48





12 x 2	12 x 6	12 x 11	12 x 9	12 x 4	12 x 6	12 x 4	7 x 12	12 x 6
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