X PRACTICE

Name _____ Date _____

Pick a Pair

Directions: For each problem, search for the numbers in the box that solve the problem. Write the pair or pairs of numbers on the line.

1	2	3	4	6	8	9

Examples

What two numbers have a product of 27? 3, 9

What two pairs of numbers have a product of 6? 2, 3 1, 6

1. What two numbers have a product of 72? _____

2. What two numbers have a product of 9? _____

3. What two numbers have a product of 16? _____

4. What two pairs of numbers have a product of 12 ? _____ _____

5. What two pairs of numbers have a product of 18? _____ _____

6. What two numbers have a product of 4? _____

7. What two numbers have a product of 36 ? _____

8. What two pairs of numbers have a product of 8? _____ _____

9. What two pairs of numbers have a product of 24? _____ _____

10. What two numbers have a product of 48? _____

Circle the correct answer to each question below.

1. Are there two numbers that can have a product of 45? **Yes** **No**
2. Are there two numbers that can have a product of 40? **Yes** **No**
3. Are there two numbers that can have a product of 54? **Yes** **No**
4. Are there two numbers that can have a product of 28? **Yes** **No**
5. Are there two numbers that can have a product of 56? **Yes** **No**

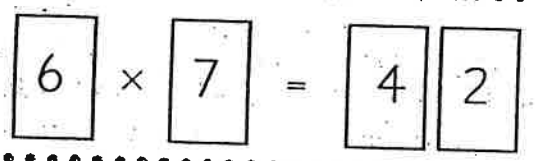
Name _____ Date _____

Mixed-Up Facts

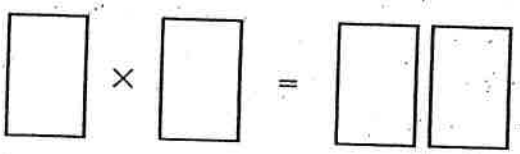
Directions: Use the mixed-up digits to make a multiplication number fact.

Example

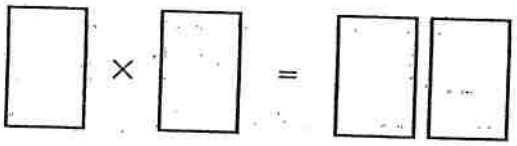
2 6 7 4



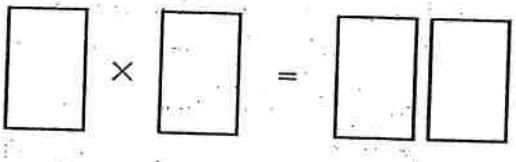
1. 2 3 7 9



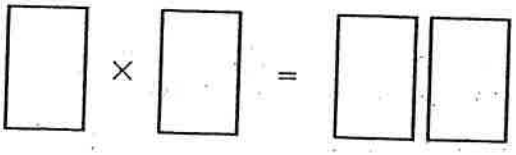
2. 4 5 6 9



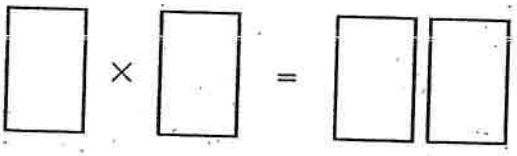
3. 3 4 6 9



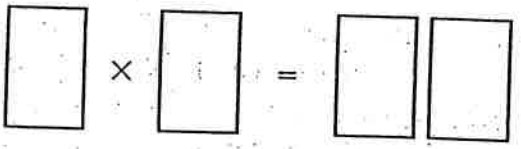
4. 3 6 6 6



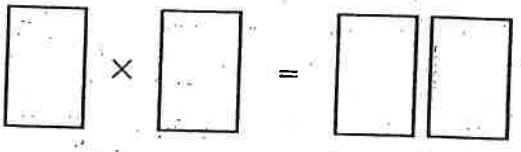
5. 7 9 8 2



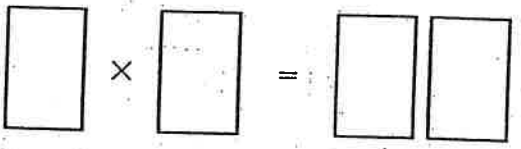
6. 4 7 7 9



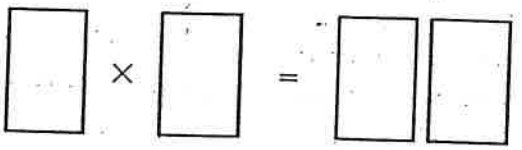
7. 1 2 3 7



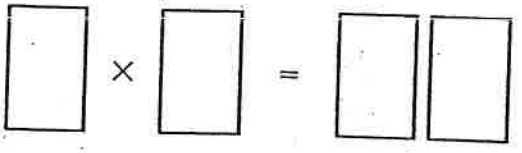
8. 4 6 8 8



9. 1 9 8 9



10. 5 6 7 8



Name _____ Date _____

Forget a Fact?

Directions: If you don't remember a multiplication fact, don't panic!
Here's a hint: You can break up numbers, or decompose them. This will help you find the answer. Try it by filling in all the blanks in the problems below.

Example

$4 \times 6 = ?$

Break up the 6 into (5 + 1)

Then, you have $4 \times (5 + 1)$

Next, you distribute the multiplier 4 to the (5 + 1). You get $(4 \times 5) + (4 \times 1)$.

Next, you work this out to be 20 + 4. Now it's easy to get 24.

1. $6 \times 5 = 5 \times 6 = 5 \times (5 + 1) = (5 \times \_\_\_\_) + (5 \times 1) = 25 + \_\_\_\_ = 30$

2. $7 \times 6 = 6 \times 7 = 6 \times (5 + 2) = (6 \times 5) + (6 \times 2) = \_\_\_\_ + 12 = \_\_\_\_$

3. $7 \times 4 = 4 \times 7 = 4 \times (5 + 2) = (4 \times 5) + (4 \times \_\_\_\_) = 20 + \_\_\_\_ = 28$

4. $6 \times 8 = 6 \times (\_\_\_\_ + 3) = (6 \times 5) + (\_\_\_\_ \times 3) = \_\_\_\_ + 18 = 48$

5. $7 \times 8 = 7 \times (\_\_\_\_ + 1) = (7 \times 7) + (7 \times 1) = 49 + \_\_\_\_ = \_\_\_\_$

6. $8 \times 4 = 4 \times 8 = 4 \times (5 + \_\_\_\_) = (4 \times \_\_\_\_) + (4 \times 3) =$
$\_\_\_\_ + 12 = \_\_\_\_$

7. $3 \times 7 = 3 \times (5 + 2) = (\_\_\_\_ \times 5) + (3 \times 2) = 15 + \_\_\_\_ = 21$

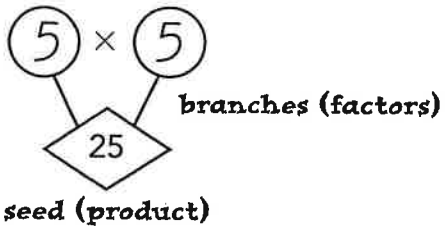
8. $8 \times 3 = 3 \times 8 = 3 \times (5 + 3) = (3 \times 5) + (3 \times \_\_\_\_) = \_\_\_\_ + 9 = \_\_\_\_$

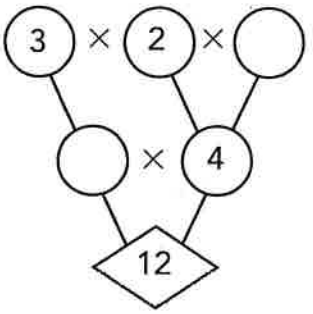
Name _____ Date _____

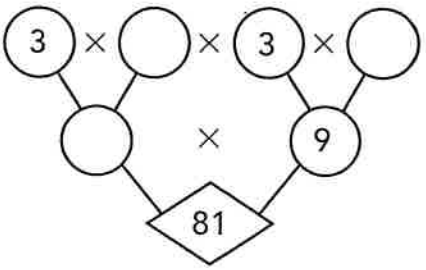
Factor Trees

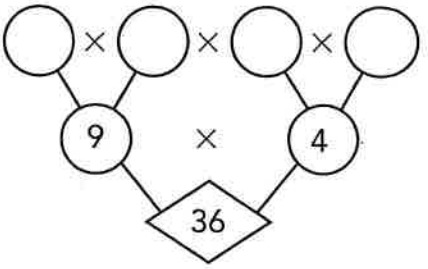
Directions: Grow a forest of factor trees. Start with a seed (a product or answer), and let the seed grow by breaking it up into branches (two factors). Continue breaking up each answer into factors. Fill in the empty boxes, and watch your tree grow!

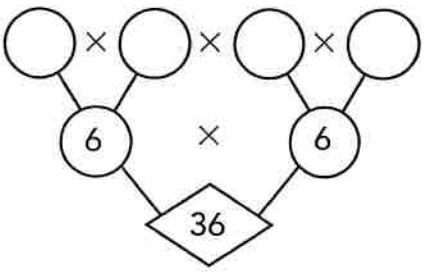
Example

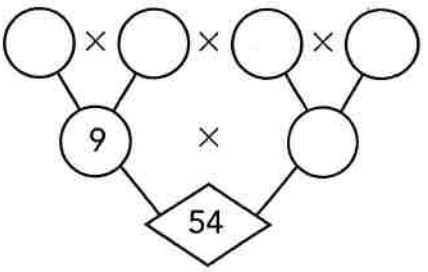
1. 

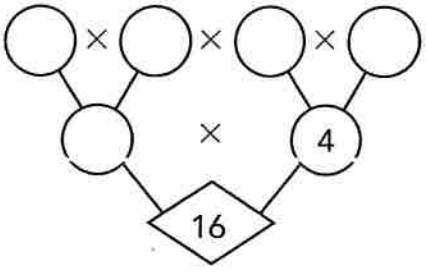
2. 

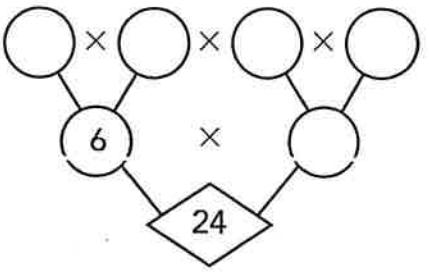
3. 

4. 

5. 

6. 

7. 

8. 

Name _____ Date _____

Breaking Down Multiplication

Directions: For each product below, write the factors that are needed to make a complete fact.

Hint: Think of two numbers that can be multiplied to give you the answer. Next, break down (decompose) one of the numbers into two other numbers so now you have three numbers.

Example

____ × ____ × ____ = 12 **Think:** 4 × 3 = 12. Since 4 can be decomposed as 2 × 2, your answer is 2 × 2 x 3 = 12.

1. ____ × ____ × ____ = 20
2. ____ × ____ × ____ = 30
3. ____ × ____ × ____ = 27
4. ____ × ____ × ____ = 40
5. ____ × ____ × ____ = 63
6. ____ × ____ × ____ = 42
7. ____ × ____ × ____ = 28
8. ____ × ____ × ____ = 24
9. ____ × ____ × ____ = 8
10. ____ × ____ × ____ = 18
11. ____ × ____ × ____ = 45
12. ____ × ____ × ____ = 54
13. ____ × ____ × ____ = 72
14. ____ × ____ × ____ = 16
15. ____ × ____ × ____ = 40
16. ____ × ____ × ____ = 36

Name _____ Date _____

Skip Counting

Directions: Continue the skip-counting pattern below by filling in the blanks.

1. Count by 2s: 2, 4, ___ , ___ , ___ , ___ , ___ , ___ , ___

2. Count by 5s: 5, 10, ___ , ___ , ___ , ___ , ___ , ___ , ___

3. Count by 3s: 3, 6, ___ , ___ , ___ , ___ , ___ , ___ , ___

4. Count by 6s: 6, 12, ___ , ___ , ___ , ___ , ___ , ___ , ___

5. Count by 9s: 9, 18, ___ , ___ , ___ , ___ , ___ , ___ , ___

6. Count by 7s: 7, 14, ___ , ___ , ___ , ___ , ___ , ___ , ___

7. Count by 4s: 4, 8, ___ , ___ , ___ , ___ , ___ , ___ , ___

8. Count by 8s: 8, 16, ___ , ___ , ___ , ___ , ___ , ___ , ___

9. Which patterns were you able to finish quickly?

_____

10. Which patterns took longer?

_____

Tip: Review the patterns that took longer. These are the products of facts you may need to study. See if you can sing them to the tune of a familiar song to help you remember them.

Name _____ Date _____

Your Own Multiplication Fact Chart

Directions: Fill in the Multiplication Fact Chart. Multiply the numbers in the left-hand column by the numbers in the top row. Start with 0 and work up to 9. As you work, look for patterns that will help you complete the chart.

The 100 Multiplication Facts

X	0	1	2	3	4	5	6	7	8	9
0										
1										
2										
3										
4										
5										
6										
7										
8										
9										

X DRILL

Name _____ Date _____

The Smart Chart

Directions: To be quick with your multiplication facts, remember that practice makes perfect. Fill in the Smart Chart with the correct products.

Hint: Try working across the top row, using the numbers in the left column as the multipliers.

X	4	0	7	3	1	8	6	9	5	2
5										
1										
0										
2										
4										
8										
6										
3										
7										
9										

What shortcuts did you discover as you completed your Smart Chart?

_____

_____

_____

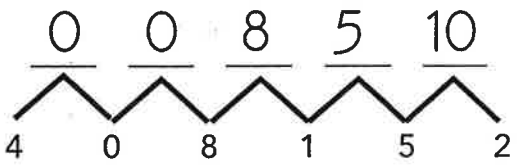
X DRILL

Name _____ Date _____

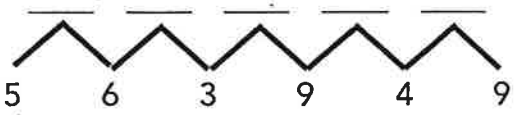
Topping These Factors

Directions: Each number below will be a factor with the number or numbers next to it in line. Multiply the factors and write your answer above each pair.

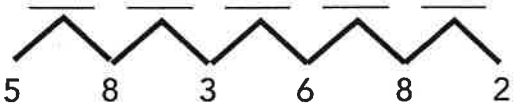
Example



1.



2.



3.

4.

5.

X DRILL

Name _____ Date _____

Finding Lonesome George

Directions: Lonesome George is the only number in the grid not used to answer any of the multiplication combinations below. To find him, first solve each problem. Then cross out the answer in the grid. If you have done all of your work correctly, you will discover one number in the grid that is not used—it's Lonesome George!

48	40	~~18~~	21	30
36	72	56	54	63
45	24	25	16	27
35	81	15	20	14
56	42	28	32	49

Example

1. $3 \times 6 =$ 18

2. $7 \times 5 =$ _____

3. $8 \times 7 =$ _____

4. $3 \times 7 =$ _____

5. $5 \times 5 =$ _____

6. $9 \times 5 =$ _____

7. $7 \times 9 =$ _____

8. $4 \times 4 =$ _____

9. $6 \times 8 =$ _____

10. $6 \times 5 =$ _____

11. $9 \times 9 =$ _____

12. $4 \times 6 =$ _____

13. $8 \times 4 =$ _____

14. $8 \times 9 =$ _____

15. $9 \times 4 =$ _____

16. $5 \times 3 =$ _____

17. $4 \times 7 =$ _____

18. $7 \times 7 =$ _____

19. $9 \times 3 =$ _____

20. $8 \times 5 =$ _____

21. $6 \times 9 =$ _____

22. $6 \times 7 =$ _____

23. $7 \times 8 =$ _____

24. $7 \times 2 =$ _____

What number is Lonesome George? _____

Name: _____

Magic Squares

What's magic about a magic square? In multiplication, it's the way different numbers in a large square work together. Somehow the different rows of numbers "magically" produce the same product in the corner.

To the right is an example:

Now here are some problems for you to work on. Complete each magic square with the right numbers, so that the problems work going across and down. Good Luck!

2 × 3 = 6

2	2	3	6	6
×4	4		4	×4
8	8	3	24	24

8 × 3 = 24

2		
		2
4		16

2		6
1		
	9	

4		8
	6	24

5		
	6	30

3		6
9		

	2	6
3		

	1	5
10		

		4
10		20

7		28
63	0	

Name: _____

Jumbo Cross-Number Puzzle

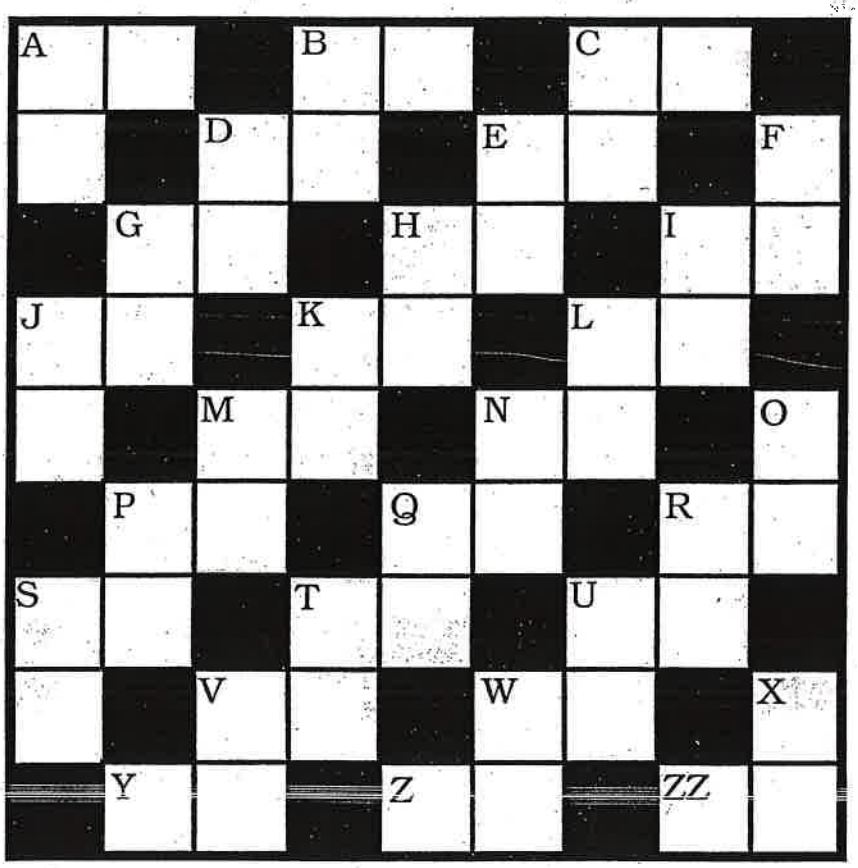
A cross-number puzzle is similar to a crossword puzzle. Solve each problem. Write the answer in the correct boxes going across or down. Write only one digit in each box.

ACROSS

A 6 × 6
B 4 × 4
C 7 × 3
D 6 × 7
E 3 × 6
G 9 × 11
H 10 × 5
I 5 × 5
J 8 × 5
K 6 × 10
L 2 × 7
M 6 × 4
N 6 × 5
P 5 × 10
Q 10 × 6
R 1 × 10
S 4 × 10
T 7 × 10
U 9 × 4
V 3 × 4
W 4 × 5
Y 9 × 5
Z 10 × 7
ZZ 4 × 9

DOWN

A 8 × 4
B 2 × 6
C 7 × 4
D 7 × 7
E 2 × 5
F 7 × 5
G 10 × 9
H 5 × 10
I 8 × 3
J 6 × 8
K 8 × 8
L 10 × 1
M 10 × 2
N 5 × 6
O 7 × 10
P 5 × 10
Q 10 × 6
R 2 × 8
S 5 × 9
T 8 × 9
U 10 × 3
V 5 × 3
W 5 × 4
X 6 × 6



Name: _____

Problem Hunt

There are twenty-four multiplication problems hidden in the puzzle below. See how many you can find. The problems may read across or down. Circle the problems—and their answers—as you spot them. Fill in the × sign and the = sign for each.

Two problems have already been circled to get you started.

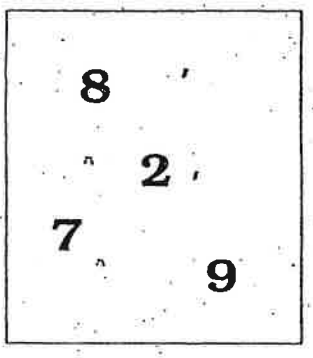
4	6	24	9	16	3	8	24	5	0
5	7	36	3	3	6	18	72	8	6
8	2	2	27	22	9	7	9	40	0
2	14	2	12	5	8	4	6	20	7
16	28	4	0	2	72	1	54	7	6
1	7	7	9	10	32	4	50	× 5	49
8 × 6 = 48			4	38	2	9	18	35	63
5	7	5	36	7	7	49	0	7	3
0	19	6	9	33	3	4	12	8	5
0	14	30	1	2	88	5	66	56	15

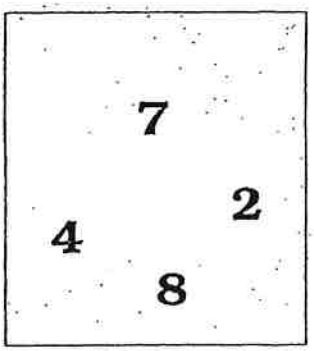
Name: _____

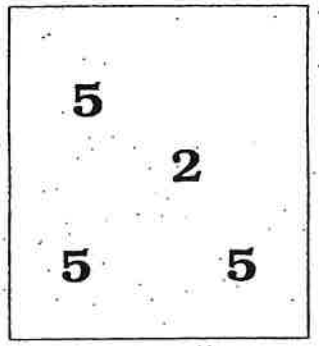
Number Jumbles

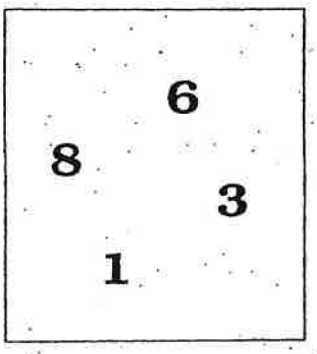
Some boxes filled with multiplication problems fell off the back of a truck. Uh-oh! Now all the numbers are jumbled.

Put things back in order. Rearrange the numbers in each box to make a multiplication problem. The first box has been done.

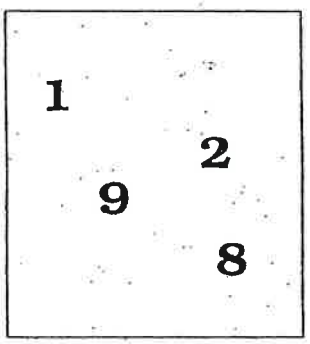


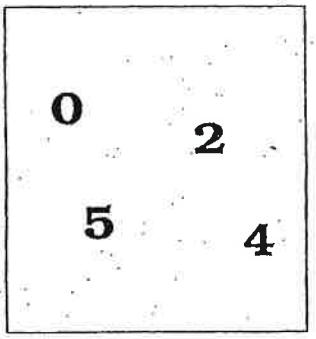


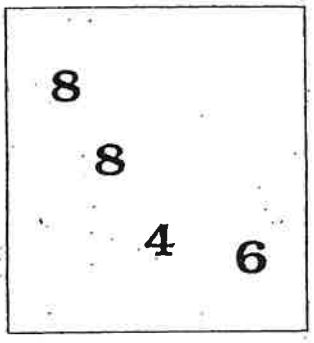


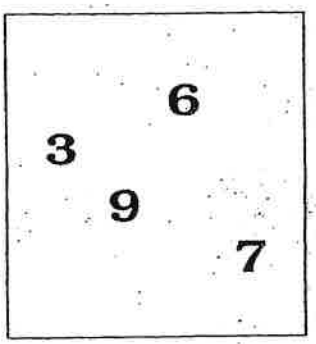


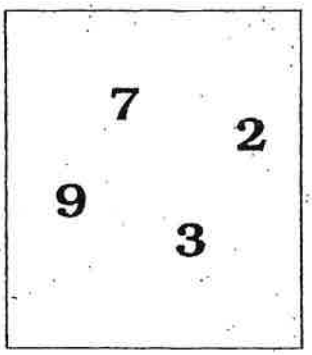
$9 \times 8 = 72$

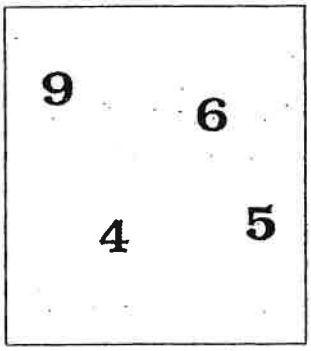


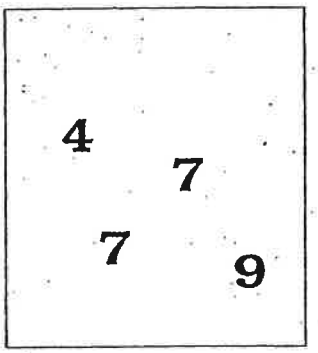


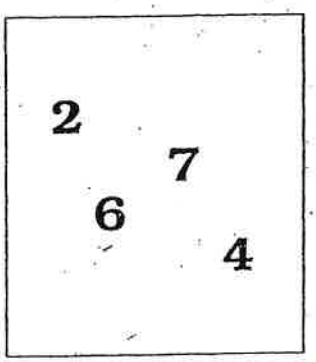












SUPER-SIZED!

Super SUDOKU

Name _____ Date _____

Multiplying by 1–12

Directions

- Every row, column, and 3-by-2 box ⊞ should contain each of these digits:

1 2 3 4 5 6

- Fill in each blank with the correct number to complete the fact.

8 x __ = 40	9 x __ = 54	3 x __ = 6	7 x __ = 7	11 x __ = 44	12 x __ = 36
7 x 2 = 1__	9 x 4 = __6	9 x 2 = __8	8 x 3 = __4	9 x 6 = __4	8 x __ = 48
11 x 6 = 6__	4 x __ = 20	7 x 7 = __9	12 x 11 = 1_2	6 x __ = 12	7 x 3 = 2__
8 x __ = 16	9 x 12 = _08	5 x 7 = __5	6 x __ = 30	8 x __ = 48	10 x 4 = __0
9 x 7 = 6__	11 x 4 = 4__	5 x __ = 25	6 x __ = 36	1 x __ = 1	11 x __ = 22
12 x 10 = _20	12 x 6 = 7__	8 x 7 = 5__	7 x 6 = __2	11 x __ = 33	10 x __ = 50

SUPER-SIZED!

Super SUDOKU

Name _____ Date _____

Dividing by 1–12

Directions

- Every row, column, and 3-by-2 box ⊞ should contain each of these digits:

1 2 3 4 5 6

- Fill in each blank with the correct number to complete the fact.

$7\overline{)7}$	$7\overline{)42}$	$\_\overline{)10}$ (2)	$\_\overline{)4}$ (1)	$\_\overline{)12}$ (6)	$4\overline{)\_6}$ (9)
$\_\overline{)24}$ (12)	$\_\overline{)40}$ (10)	$9\overline{)27}$	$9\overline{)54}$	$11\overline{)\_5}$ (5)	$7\overline{)2\_}$ (3)
$\_\overline{)24}$ (8)	$\_\overline{)20}$ (4)	$4\overline{)3\_}$ (8)	$9\overline{)8\_}$ (9)	$7\overline{)8\_}$ (12)	$8\overline{)5\_}$ (7)
$8\overline{)48}$	$12\overline{)12}$	$9\overline{)\_5}$ (5)	$\_\overline{)30}$ (6)	$\_\overline{)18}$ (6)	$\_\overline{)14}$ (7)
$\_\overline{)55}$ (11)	$8\overline{)\_4}$ (3)	$12\overline{)9\_}$ (8)	$\_\overline{)9}$ (3)	$\_\overline{)8}$ (8)	$\_\overline{)40}$ (10)
$3\overline{)12}$	$9\overline{)6\_}$ (7)	$3\overline{)33}$ (1_)	$8\overline{)16}$	$1\overline{)\_}$ (6)	$\_\overline{)40}$ (8)