3.OA.5, 3.OA.9

# MY Homework

#### Lesson 1

Patterns in the Multiplication Table

## Homework Helper



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Find the product of  $3 \times 4$ .

Find 3 in the far left column.

2

Find 4 in the row along the top.

Follow the numbers across and down until they meet. This is the product.

factors
$$3 \times 4 = 12 \leftarrow product$$

The Commutative Property tells you that you can change the order of the factors without changing the product.

factors		
4 × 3 =	= 12 🕶	product

X	0	1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	ф	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9	10
2	0	2	4	6	*	10	12	14	16	18	20
3	0	3	6	<del>-9</del>	12	15	18	21	24	27	30
4	0	4	8	12	16	20	24	28	32	36	40
5	0	5	10	15	20	25	30	35	40	45	50
6	0	6	12	18	24	30	36	42	48	54	60
7	0	7	14	21	28	35	42	49	56	63	70
8	0	8	16	24	32	40	48	56	64	72	80
9	0	9	18	27	36	45	54	63	72	81	90
10	0	10	20	30	40	50	60	70	80	90	100

### **Practice**

- 1. Look at the products with a factor of 5. What pattern do you see? The products with a factor of 5 end in \_\_\_\_\_ or
- **2.** Look at the products with a factor of 0. What do you notice? The products with a factor of 0 end in \_\_\_\_\_\_.

**3.** Find  $10 \times 5$ . Circle the factors and the product. Write the product.

#### 50; Sample circles shown.

**4.** Shade a row of numbers yellow to show the products with a factor of 10. What do you notice about this row?

The products with a factor of 10 end

in  $\mathbf{0}$  .

>	<	0	1	2	3	4	5	6	7	8	9	10
	0	0	0	0	0	0	0	0	0	0	0	0
1	1	0	1	2	3	4	5	6	7	8	9	10
2	2	0	2	4	6	8	10	12	14	16	18	20
7	5	0	3	6	9	12	15	18	21	24	27	30
4	1	0	4	8	12	16	20	24	28	32	36	40
	5	0	5	10	15	20	25	30	35	40	45	50
	5	0	6	12	18	24	30	36	42	48	54	60
7	7	0	7	14	21	28	35	42	49	56	63	70
-	8	0	8	16	24	32	40	48	56	64	72	80
9	9	0	9	18	27	36	45	54	63	72	81	90
(1	0	0	10	20	30	40	50	60	70	80	90	100



## **Problem Solving**

5. PRACTICE Model Math Mason has 1 notebook for science and 1 notebook for reading. He put 9 stickers on each notebook. How many stickers did Mason use in all? Write two multiplication sentences.

18 stickers;  $2 \times 9 = 18$ ;  $9 \times 2 = 18$ 

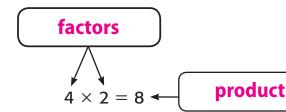
## Vocabulary Check



**6.** Label each with the correct word.

factors

product



#### **Test Practice**

- **7.** Which property states the order in which two numbers are multiplied does not change the product?
  - Associative Property of Addition
  - B Commutative Property of Multiplication
  - © Inverse Operations
  - D Identity Property of Addition