

ALGEBRA

Lesson 1.5

Name _____

Multiplication Patterns

COMMON CORE STANDARD CC.5.NBT.2

Understand the place value system.

Use mental math to complete the pattern.

1. $8 \times 3 = 24$

$$(8 \times 3) \times 10^1 = \underline{240}$$
$$(8 \times 3) \times 10^2 = \underline{2,400}$$
$$(8 \times 3) \times 10^3 = \underline{24,000}$$

2. $5 \times 6 = \underline{\hspace{2cm}}$

$$(5 \times 6) \times 10^1 = \underline{\hspace{2cm}}$$

$$(5 \times 6) \times 10^2 = \underline{\hspace{2cm}}$$

$$(5 \times 6) \times 10^3 = \underline{\hspace{2cm}}$$

3. $3 \times \underline{\hspace{2cm}} = 27$

$$(3 \times 9) \times 10^1 = \underline{\hspace{2cm}}$$

$$(3 \times 9) \times 10^2 = \underline{\hspace{2cm}}$$

$$(3 \times 9) \times 10^3 = \underline{\hspace{2cm}}$$

4. $\underline{\hspace{2cm}} \times 4 = 28$

$$(7 \times 4) \times \underline{\hspace{2cm}} = 280$$

$$(7 \times 4) \times \underline{\hspace{2cm}} = 2,800$$

$$(7 \times 4) \times \underline{\hspace{2cm}} = 28,000$$

5. $6 \times 8 = \underline{\hspace{2cm}}$

$$(6 \times 8) \times 10^2 = \underline{\hspace{2cm}}$$

$$(6 \times 8) \times 10^3 = \underline{\hspace{2cm}}$$

$$(6 \times 8) \times 10^4 = \underline{\hspace{2cm}}$$

6. $\underline{\hspace{2cm}} \times 4 = 16$

$$(4 \times 4) \times 10^2 = \underline{\hspace{2cm}}$$

$$(4 \times 4) \times 10^3 = \underline{\hspace{2cm}}$$

$$(4 \times 4) \times 10^4 = \underline{\hspace{2cm}}$$

Use mental math and a pattern to find the product.

7. $(2 \times 9) \times 10^2 = \underline{\hspace{2cm}}$

8. $(8 \times 7) \times 10^2 = \underline{\hspace{2cm}}$

9. $(9 \times 6) \times 10^3 = \underline{\hspace{2cm}}$

10. $(3 \times 7) \times 10^3 = \underline{\hspace{2cm}}$

11. $(5 \times 9) \times 10^4 = \underline{\hspace{2cm}}$

12. $(4 \times 8) \times 10^4 = \underline{\hspace{2cm}}$

13. $(8 \times 8) \times 10^3 = \underline{\hspace{2cm}}$

14. $(6 \times 4) \times 10^4 = \underline{\hspace{2cm}}$

15. $(5 \times 5) \times 10^3 = \underline{\hspace{2cm}}$

Problem Solving

16. The Florida Everglades welcomes about 2×10^3 visitors per day. Based on this, about how many visitors come to the Everglades per week?

17. The average person loses about 8×10^1 strands of hair each day. About how many strands of hair would the average person lose in 9 days?

Lesson Check (CC.5.NBT.2)

- How many zeros are in the product $(6 \times 5) \times 10^3$?
(A) 3
(B) 4
(C) 5
(D) 6
- Addison studies a tarantula that is 30 millimeters long. Suppose she uses a microscope to magnify the spider by 4×10^2 . How long will the spider appear to be?
(A) 12 millimeters
(B) 120 millimeters
(C) 1,200 millimeters
(D) 12,000 millimeters

Spiral Review (Reviews CC.4.OA.3, CC.4.NBT.5)

- Hayden has 6 rolls of dimes. There are 50 dimes in each roll. How many dimes does he have altogether? (Grade 4)
(A) 300
(B) 110
(C) 56
(D) 30
- At a museum, 100 posters are displayed in each of 4 rooms. Altogether, how many posters are displayed? (Grade 4)
(A) 40
(B) 100
(C) 104
(D) 400
- An adult ticket to the zoo costs \$20, and a child's ticket costs \$10. How much will it cost for Mr. and Mrs. Brown and their 4 children to get into the zoo? (Grade 4)
(A) \$40
(B) \$60
(C) \$80
(D) \$100
- A store sells a gallon of milk for \$3. A baker buys 30 gallons of milk for his bakery. How much will he have to pay? (Grade 4)
(A) \$120
(B) \$90
(C) \$60
(D) \$30