

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

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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)

1. How many zeros are in the product $(6 \times 5) \times 10^3$?
(A) 3
(B) 4
(C) 5
(D) 6
2. 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)

3. 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
4. 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
5. 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
6. 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