

ALGEBRA

Lesson 4.1

Name _____

Multiplication Patterns with Decimals

Complete the pattern.

COMMON CORE STANDARD CC.5.NBT.2

Understand the place value system.

$$\begin{aligned} 1. \quad 2.07 \times 1 &= \underline{2.07} \\ 2.07 \times 10 &= \underline{20.7} \\ 2.07 \times 100 &= \underline{207} \\ 2.07 \times 1,000 &= \underline{2,070} \end{aligned}$$

$$\begin{aligned} 2. \quad 1 \times 30 &= \underline{30} \\ 0.1 \times 30 &= \underline{3} \\ 0.01 \times 30 &= \underline{0.3} \end{aligned}$$

$$\begin{aligned} 3. \quad 10^0 \times 0.23 &= \underline{0.23} \\ 10^1 \times 0.23 &= \underline{2.3} \\ 10^2 \times 0.23 &= \underline{23} \\ 10^3 \times 0.23 &= \underline{230} \end{aligned}$$

$$\begin{aligned} 4. \quad 390 \times 1 &= \underline{390} \\ 390 \times 0.1 &= \underline{39} \\ 390 \times 0.01 &= \underline{3.9} \end{aligned}$$

$$\begin{aligned} 5. \quad 10^0 \times 49.32 &= \underline{49.32} \\ 10^1 \times 49.32 &= \underline{493.2} \\ 10^2 \times 49.32 &= \underline{4,932} \\ 10^3 \times 49.32 &= \underline{49,320} \end{aligned}$$

$$\begin{aligned} 6. \quad 1 \times 9,670 &= \underline{9,670} \\ 0.1 \times 9,670 &= \underline{967} \\ 0.01 \times 9,670 &= \underline{96.7} \end{aligned}$$

$$\begin{aligned} 7. \quad 874 \times 1 &= \underline{874} \\ 874 \times 10 &= \underline{8,740} \\ 874 \times 100 &= \underline{87,400} \\ 874 \times 1,000 &= \underline{874,000} \end{aligned}$$

$$\begin{aligned} 8. \quad 10^0 \times 10 &= \underline{10} \\ 10^1 \times 10 &= \underline{100} \\ 10^2 \times 10 &= \underline{1,000} \\ 10^3 \times 10 &= \underline{10,000} \end{aligned}$$

$$\begin{aligned} 9. \quad 1 \times 5 &= \underline{5} \\ 0.1 \times 5 &= \underline{0.5} \\ 0.01 \times 5 &= \underline{0.05} \end{aligned}$$

Problem Solving

REAL WORLD

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10. Nathan plants equal-sized squares of sod in his front yard. Each square has an area of 6 square feet. Nathan plants a total of 1,000 squares in his yard. What is the total area of the squares of sod?

6,000 square feet

11. Three friends are selling items at a bake sale. May makes \$23.25 selling bread. Inez sells gift baskets and makes 100 times as much as May. Carolyn sells pies and makes one tenth of the money Inez makes. How much money does each friend make?

May: \$23.25; Inez: \$2,325;
Carolyn: \$232.50

Lesson Check (CC.5.NBT.2)

- The length of the Titanic was 882 feet. Porter's history class is building a model of the Titanic. The model is $\frac{1}{100}$ of the actual length of the ship. How long is the model?
 - ☐ (A) 882 feet
 - ☐ (B) 88.2 feet
 - ☒ (C) 8.82 feet
 - ☐ (D) 0.882 feet
- Ted is asked to multiply $10^2 \times 18.72$. How should he move the decimal point to get the correct product?
 - ☒ (A) 2 places to the right
 - ☐ (B) 1 place to the right
 - ☐ (C) 1 place to the left
 - ☐ (D) 2 places to the left

Spiral Review (CC.5.NBT.3b, CC.5.NBT.4, CC.5.NBT.6, CC.5.NBT.7)

- The table shows the height in meters of some of the world's tallest buildings. Which list shows the heights in order from least to greatest? (Lesson 3.3)
- Madison had \$187.56 in her checking account. She deposited \$49.73 and then used her debit card to spend \$18.64. What is Madison's new account balance? (Lesson 3.11)

Building	Height (meters)
Zifeng Tower	457.2
International Finance Center	415.138
Burj Khalifa	828.142
Petronas Towers	452.018

- ☐ (A) 457.2, 415.138, 828.142, 452.018
 - ☐ (B) 415.138, 457.2, 452.018, 828.142
 - ☐ (C) 828.142, 457.2, 452.018, 415.138
 - ☒ (D) 415.138, 452.018, 457.2, 828.142
- What is 3.47 rounded to the nearest tenth? (Lesson 3.4)
 - ☐ (A) 3.0
 - ☐ (B) 3.4
 - ☒ (C) 3.5
 - ☐ (D) 4.0
 - The city gardener ordered 1,680 tulip bulbs for Riverside Park. The bulbs were shipped in 35 boxes with an equal number of bulbs in each box. How many tulip bulbs were in each box? (Lesson 2.6)
 - ☐ (A) 47
 - ☒ (B) 48
 - ☐ (C) 57
 - ☐ (D) 58