Multiplying Decimals in Context

ANSWER KEY • Amplify Alignment: Grade 6 Accelerated, Unit 3, Lesson 17

1. Determine the value of each expression.

a $4 \cdot (0.5)$ — **2**

b $(7.3) \cdot 3$ — **21.9**

c $2 \cdot (14.6)$ — **29.2**

d $(0.8) \cdot 6$ — **4.8**

2. Cheese at the deli costs $6.89 per pound. Tara buys 1.75 pounds. How much will she pay, rounded to the nearest cent? Show your thinking.

$6.89 \cdot 1.75 = 12.0575 \approx \$12.06$

Problems 3–6: Determine the value of each expression using any strategy. Show or explain your thinking.

3. $(2.6) \cdot (4.8)$

12.48

4. $(1.5) \cdot (8.8)$

13.2

5. $(0.62) \cdot (0.5)$

0.31

6. $(7.35) \cdot (5.06)$

37.191

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7. **A dog weighs 6.8 kilograms and a cat weighs 12.5 pounds. Which weighs more, and by how much? (1 kilogram = 2.2 pounds) Show your thinking.**

   Dog: 6.8 · 2.2 = 14.96 pounds. The dog weighs more by 2.46 pounds.

8. **Apples cost $1.89 per pound and grapes cost $3.49 per pound. What is the total cost of 2.5 pounds of apples and 1.2 pounds of grapes? Round to the nearest cent.**

   1.89 · 2.5 = 4.725 and 3.49 · 1.2 = 4.188. Total: 8.913 ≈ $8.91

9. **Here are three shapes.**

   - A rectangle with a base of 7.25 cm and a height of 4.6 cm
   - A square with side lengths of 5.8 cm
   - A rectangle that is 12.4 cm wide and 2.7 cm long

   Mia says the square has the greatest area. Is Mia correct? Explain your thinking.

   Yes. The areas are 33.35 sq. cm, 33.64 sq. cm, and 33.48 sq. cm. The square's area, 33.64 sq. cm, is the greatest.

10. **There are 3.25 grams of protein in 1 ounce of yogurt. Sam says there are 2.6 grams of protein in 8 ounces of yogurt. Is Sam correct? Explain your thinking.**

    No. 3.25 · 8 = 26 grams. Sam's answer is less than the amount in just 1 ounce, so it can't be right.