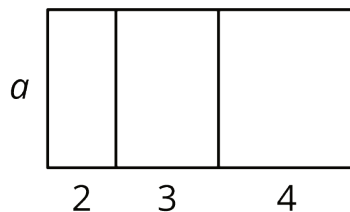


Lesson 10 Practice Problems

1. Here is a rectangle.

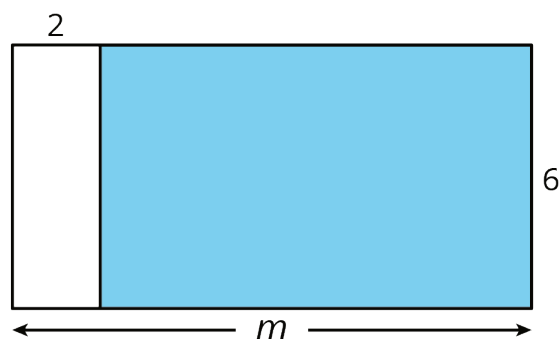


a. Explain why the area of the large rectangle is $2a + 3a + 4a$.

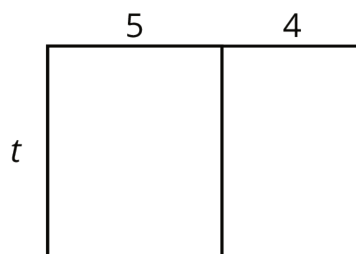
b. Explain why the area of the large rectangle is $(2 + 3 + 4)a$.

2. Is the area of the shaded rectangle $6(2 - m)$ or $6(m - 2)$?

Explain how you know.



3. Choose the expressions that do *not* represent the total area of the rectangle. Select **all** that apply.



- A. $5t + 4t$
- B. $t + 5 + 4$
- C. $9t$
- D. $4 \cdot 5 \cdot t$
- E. $t(5 + 4)$

4. Evaluate each expression mentally.

- a. $35 \cdot 91 - 35 \cdot 89$
- b. $22 \cdot 87 + 22 \cdot 13$
- c. $\frac{9}{11} \cdot \frac{7}{10} - \frac{9}{11} \cdot \frac{3}{10}$

(From Unit 4, Lesson 9.)

5. Select **all** the expressions that are equivalent to $4b$.

- A. $b + b + b + b$
- B. $b + 4$
- C. $2b + 2b$
- D. $b \cdot b \cdot b \cdot b$
- E. $b \div \frac{1}{4}$

(From Unit 4, Lesson 8.)

6. Solve each equation. Show your reasoning.

$$111 = 14a$$

$$13.65 = b + 4.88$$

$$c + \frac{1}{3} = 5\frac{1}{8}$$

$$\frac{2}{5}d = \frac{17}{4}$$

$$5.16 = 4e$$

(From Unit 4, Lesson 4.)

7. Andre ran $5\frac{1}{2}$ laps of a track in 8 minutes at a constant speed. It took Andre x minutes to run each lap. Select **all** the equations that represent this situation.

A. $(5\frac{1}{2})x = 8$

B. $5\frac{1}{2} + x = 8$

C. $5\frac{1}{2} - x = 8$

D. $5\frac{1}{2} \div x = 8$

E. $x = 8 \div (5\frac{1}{2})$

F. $x = (5\frac{1}{2}) \div 8$

(From Unit 4, Lesson 2.)