Lesson 11 Practice Problems

1. For each expression, use the distributive property to write an equivalent expression.

   a. $4(x + 2)$

   b. $(6 + 8) \cdot x$

   c. $4(2x + 3)$

   d. $6(x + y + z)$

2. Priya rewrites the expression $8y - 24$ as $8(y - 3)$. Han rewrites $8y - 24$ as $2(4y - 12)$. Are Priya's and Han's expressions each equivalent to $8y - 24$? Explain your reasoning.

3. Select **all** the expressions that are equivalent to $16x + 36$.

   A. $16(x + 20)$

   B. $x(16 + 36)$

   C. $4(4x + 9)$

   D. $2(8x + 18)$

   E. $2(8x + 36)$

4. The area of a rectangle is $30 + 12x$. List at least 3 possibilities for the length and width of the rectangle.

5. Select **all** the expressions that are equivalent to $\frac{1}{2}z$.

   A. $z + z$

   B. $z \div 2$

   C. $z \cdot z$

   D. $\frac{1}{4}z + \frac{1}{4}z$

   E. $2z$

(From Unit 6, Lesson 8.)

6. a. What is the perimeter of a square with side length:

   3 cm? 7 cm? s cm?

   b. If the perimeter of a square is 360 cm, what is its side length?

   c. What is the area of a square with side length:

   3 cm? 7 cm? s cm?

   d. If the area of a square is 121 cm^2, what is its side length?

(From Unit 6, Lesson 6.)

7. Solve each equation.

$10 = 4a$ $5b = 17.5$ $1.036 = 10c$

$0.6d = 1.8$ $15 = 0.1e$

(From Unit 6, Lesson 5.)