Unit 6 Lesson 5 Cumulative Practice Problems

1. Select **all** the expressions that equal $\frac{3.15}{0.45}$.

   A. $(3.15) \cdot (0.45)$

   B. $(3.15) \div (0.45)$

   C. $(3.15) \cdot \frac{1}{0.45}$

   D. $(3.15) \div \frac{45}{100}$

   E. $(3.15) \cdot \frac{100}{45}$

   F. $\frac{0.45}{3.15}$

2. Which expressions are solutions to the equation $\frac{3}{4}x = 15$? Select **all** that apply.

   A. $\frac{15}{\frac{3}{4}}$

   B. $\frac{15}{\frac{4}{3}}$

   C. $\frac{4}{3} \cdot 15$

   D. $\frac{3}{4} \cdot 15$

   E. $15 \div \frac{3}{4}$

3. Solve each equation.

   $4a = 32$ $\quad$ $4 = 32b$ $\quad$ $10c = 26$ $\quad$ $26 = 100d$

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4. For each equation, write a story problem represented by the equation. For each equation, state what quantity x represents. If you get stuck, consider drawing a diagram.

   a. $\frac{3}{4} + x = 2$

   b. $1.5x = 6$

5. Write as many mathematical expressions or equations as you can about the image. Include a fraction, a decimal number, or a percentage in each.

(From Unit 3, Lesson 13.)

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6. In a lilac paint mixture, 40% of the mixture is white paint, 20% is blue, and the rest is red. There are 4 cups of blue paint used in a batch of lilac paint.

   a. How many cups of white paint are used?

   b. How many cups of red paint are used?

   c. How many cups of lilac paint will this batch yield?

   If you get stuck, consider using a tape diagram.

   (From Unit 3, Lesson 12.)

7. Triangle P has a base of 12 inches and a corresponding height of 8 inches. Triangle Q has a base of 15 inches and a corresponding height of 6.5 inches. Which triangle has a greater area? Show your reasoning.

   (From Unit 1, Lesson 9.)

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