

Unit 9: Putting It All Together

PRACTICE · SET 2

Name: _____ Date: _____

Solve each problem and write your answer in simplest form. Show your work on scratch paper.

1. The quantity y is proportional to x . When $x = 6$, $y = 15$. Find the constant of proportionality k in the equation $y = kx$.

Answer: _____

3. Compute: $-\frac{3}{4} + \frac{5}{8}$. Give your answer as a fraction in simplest form.

Answer: _____

5. Solve for x : $3x - 7 = 20$

Answer: _____

7. A shirt normally costs \$40 and is on sale for 25% off. What is the sale price in dollars?

Answer: _____

9. Compute: $-5 - (-8)$

Answer: _____

11. Solve for x : $2(x + 3) = 16$

Answer: _____

2. A car travels 210 miles in 3.5 hours at a constant speed. What is its speed in miles per hour?

Answer: _____

4. Compute: $-\frac{2}{3} \times \frac{9}{10}$. Give your answer as a fraction in simplest form.

Answer: _____

6. Solve for x : $\frac{x}{4} + 5 = 12$

Answer: _____

8. Solve the proportion for x : $\frac{4}{6} = \frac{x}{15}$

Answer: _____

10. Compute: $-\frac{3}{5} \div \frac{6}{25}$. Give your answer as a fraction in simplest form.

Answer: _____

12. 8 identical pens cost \$6. At the same unit price, how much do 20 pens cost, in dollars?

Answer: _____