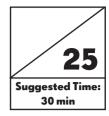
CHAPTER TEST A



Algebraic Expressions



Concepts and Skills (10 × 1 point = 10 points)

Simplify each expression.

2.
$$\frac{3}{4}x - \frac{1}{2}x + \frac{1}{8}x$$

3.
$$9.8y - 5.2x - 6.8y + 7.2x$$

4.
$$\frac{2}{3} + \frac{5}{8}p - \frac{1}{3} - \frac{1}{8}p$$

Expand each expression.

5.
$$-2.1(3p - 5)$$

6.
$$\frac{1}{4} \left(\frac{m}{3} + \frac{2}{5} \right)$$

Factor each expression.

7.
$$5p + 35q$$

8.
$$-18r - 6s$$

Translate each verbal description into an algebraic expression. Simplify.

- **9.** Three-fifths x subtracted from 4 times one-eighth w
- **10.** 60% of the product of one-twelfth y and two-thirds z

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Problem Solving (Questions 11 to 13: 3 × 2 points = 6 points, Questions 14 to 16: 3 × 3 points = 9 points)

Solve. Show your work.

11. A pencil costs \$3.50 and a pen costs \$6.70. Jessica bought *m* pens. She also bought 4 fewer pencils than pens. Write an algebraic expression for the total amount she spent.

- **12.** There are 26 packets of p almonds and 8 packets of q walnuts. Of the total packets of nuts, ten were given away.
 - a) Write an algebraic expression for the remaining packets of nuts.

b) Factor the expression.

13. Find the perimeter of the parallelogram.

