

LESSON
17-2

Adding Polynomial Expressions

Practice and Problem Solving: A/B

Add the polynomial expressions using the vertical format.

1.
$$\begin{array}{r} (10g^2 + 3g - 10) \\ + (2g^2 + g + 9) \\ \hline \end{array}$$

2.
$$\begin{array}{r} (4x^3 + x^2 + 2x) \\ + (3x^3 + x^2 + 4x) \\ \hline \end{array}$$

3.
$$\begin{array}{r} (11b^2 + 3b - 1) \\ + (2b^2 + 2b + 8) \\ \hline \end{array}$$

4.
$$\begin{array}{r} (c^3 + 2c^2 + 2c) \\ + (-3c^3 + c^2 - 4c) \\ \hline \end{array}$$

5.
$$\begin{array}{r} (ab^2 + 13b - 4a) \\ + (3ab^2 + a + 7b) \\ \hline \end{array}$$

6.
$$\begin{array}{r} (-r^2 + 8pr - p) \\ + (-12r^2 - 2pr + 8p) \\ \hline \end{array}$$

Add the polynomial expressions using the horizontal format.

7. $(3y^2 - y + 3) + (2y^2 + 2y + 9)$

8. $(4z^3 + 3z^2 + 8) + (2z^3 + z^2 - 3)$

9. $(6s^3 + 9s + 10) + (3s^3 + 4s - 10)$

10. $(15a^4 + 6a^2 + a) + (6a^4 - 2a^2 + a)$

11. $(-7a^2b^3 + 3a^3b - 9ab) + (4a^2b^3 - 5a^3b + ab)$

12. $(2p^4q^2 + 5p^3q - 2pq) + (8p^4q^2 - 3p^3q - pq)$

Solve.

13. A rectangular picture frame has the dimensions shown in the figure. Write a polynomial that represents the perimeter of the frame.

