

Dividing Polynomials (12.3)**Dividing a Polynomial by a Monomial:**

1.
$$\frac{4x^3 + 6x - 5}{2}$$

2.

Long Division:

3.
$$\frac{5733}{13}$$

4.

Dividing a Polynomial by a Polynomial (Long Division):

5.
$$\frac{x^2 + 2x - 8}{x - 2}$$

7.

6.

8.

12.3 Lesson Practice

Dividing Polynomials

9. $\frac{x^2 - 6x + 9}{x - 3}$

10. $\frac{x^2 - 25}{x + 5}$

11. $\frac{50x^5 - 7x^4 + x^2}{x}$

12. $\frac{8x^3 - 22x^2 - 5x + 12}{4x + 3}$

13. $\frac{x^2 + 8x - 16}{x + 4}$

14. $\frac{2x^3 - 9x^2 + 11x - 3}{2x - 3}$

15. $\frac{24x^6 + 32x^5 - 8x^2}{-8x^2}$

16. $\frac{y^3 - y^2 + y - 1}{y + 1}$

9. $x - 3$ 10. $x - 5$ 11. $50x^4 - 7x^3 + x$ 12. $2x^2 - 7x + 4$ 13. $x + 4 + \frac{-32}{x + 4}$ 14. $x^2 - 3x + 1$

15. $-3x^4 - 4x^3 + 1$ 16. $y^2 - 2y + 3 + \frac{-4}{y + 1}$