

Notes 2.5.6

Division of Polynomials

Complete each division

1.
$$\frac{36x^4 - 20x^3 + 40x^2}{4x^2}$$

2.
$$\frac{18a^5c^3 + 21a^4c - 24a^3c^2}{-3a^3c}$$

3.
$$\frac{-12m^4n^2 + 30m^2n^5 + 6m^3n^2 - m^4n^3}{-6m^3n^2}$$

4.
$$\frac{x^3 + 8x^2 - 5x - 60}{x + 3}$$

5.
$$\frac{2x^4 - 7x^3 - 80x + 20}{x - 5}$$

6.
$$\frac{10x^3 - x^2 + x - 40}{2x - 3}$$

7.
$$\frac{x^4 - 3x^3 + x^2 - 15x + 30}{x^2 + 5}$$

$$8. \quad \frac{2x^3 - 13x^2 + 24x - 12}{2x + 3}$$

$$9. \quad \frac{8x^4 + 14x^3 + 5x^2 - 20x - 6}{4x + 5}$$

$$10. \quad \frac{15x^6 - 12x^5 - 5x^3 - 6x^2 + 8x}{5x - 4}$$

$$11. \quad \frac{64x^6 + 16x^3 + 1}{2x + 1}$$

$$12. \quad \frac{4x^5 - 2x^3 + x^2 - 1}{x^2 + 3}$$

$$13. \quad \frac{10x^6 + 2x^3 - 48x^2 - x}{2x^2 - 8}$$