

Homework 2.5 - Dividing Monomials

Date _____

Simplify by dividing.

1) $\frac{2r^4}{r^3}$

$2r$

2) $\frac{4x^4}{x}$

$4x^3$

3) $\frac{12x^3}{4x}$

$3x^2$

4) $\frac{5xy^3}{xy^2}$

$5y$

5) $\frac{12x^2y^5}{6xy^2}$

$2xy^3$

6) $\frac{2h^8j^5k^7}{8j^3k^5}$

$\frac{1}{4}h^8j^2k^2$ or $0.25h^8j^2k^2$

Divide the monomial into each term of the polynomial.

7) $\frac{15x^3y^4 + 50xy}{5xy}$

$3x^2y^3 + 10$

8) $\frac{8k^4 + 32k^3 - 72k^2}{8k}$

$k^3 + 4k^2 - 9k$

$$9) \frac{-18m^2n - 6mn^2 - 20m}{-2m}$$

$$9mn + 3n^2 + 10$$

$$10) \frac{54h^6j^2 - 63h^4j^3 + 72h^3j^4}{9h^3j^2}$$

$$6h^3 - 7hj + 8j^2$$

$$11) \frac{-18x^2 - 90x^3 - 54x^5 - 27x^6}{-9x^2}$$

$$2 + 10x + 6x^3 + 3x^4$$

$$12) \frac{30m^3n^7 - 30m^6n^4 + 27m^3n^6 - 15m^4n^4}{3m^3n^4}$$

$$10n^3 - 10m^3 + 9n^2 - 5m$$

$$13) \frac{10x^2y^2z^5 - 10x^2y^3z^2}{10x^2y^2z^2}$$

$$z^3 - y$$

$$14) \frac{3b^4c^9a - 15b^{10}c^2a + 3b^4c^5a^2 + 24b^4c^3}{3b^4c^2}$$

$$ac^7 - 5ab^6 + a^2c^3 + 8c$$