

## Homework #5 - Dividing Monomials

Date \_\_\_\_\_ 5T \_\_\_\_\_

**Simplify by dividing.**

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

2)  $\frac{3v^4}{v^3}$

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

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

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

6)  $\frac{4x^3z^6}{10x^3z^4}$

7)  $\frac{4x^7y^4z^4}{8x^6y^2z^4}$

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

**Divide the monomial into each term of the polynomial.**

9)  $\frac{-8n^3 + 18n^2}{2n^2}$

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

$$11) \frac{8k^4 + 32k^3 - 72k^2}{8k}$$

$$12) \frac{-18m^2n - 6mn^2 - 20m}{-2m}$$

$$13) \frac{54h^6j^2 - 63h^4j^3 + 72h^3j^4}{9h^3j^2}$$

$$14) \frac{-18x^2 - 90x^3 - 54x^5 - 27x^6}{-9x^2}$$

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

$$16) \frac{10x^2y^2z^5 - 10x^2y^3z^2}{10x^2y^2z^2}$$

$$17) \frac{60n^2 + 18n - 24}{6}$$

$$18) \frac{3b^4c^9a - 15b^{10}c^2a + 3b^4c^5a^2 + 24b^4c^3}{3b^4c^2}$$