

**HOMEWORK: Properties of Exponents****Day 7**

Simplify.

1.  $(7gh^5)^3$

$$343g^3h^{15}$$

2.  $(3c^6d^2)(8c^5d)$

$$24c^{11}d^3$$

3.  $\frac{(5m)^{-2}}{7p^{-8}}$

$$\frac{p^8}{175m^2}$$

4.  $\left(\frac{x^2y}{x^3y^4}\right)^{-1}$

$$xy^3$$

5.  $(x-8)^2$

$$x^2 - 16x + 64$$

6.  $(-8x)^2$

$$64x^2$$

7.  $3x^4y$

$$\frac{3y}{x^4}$$

8.  $(3xy)^{-4}$

$$\frac{1}{81x^4y^4}$$

9.  $3(xy)^{-4}$

$$\frac{3}{x^4y^4}$$

10.  $-\frac{7(j^5k^2)^0}{21jk^{-7}}$

$$\frac{-k^7}{3j}$$

11.  $-(y+7)^2$

$$-y^2 - 14y - 49$$

12.  $\frac{(-4v^{-2}w^3)^3}{-3(v^5w^{-2})^2}$

$$\frac{64w^{13}}{3v^{16}}$$

pick ATLEAST 3

13.  $(-9h^3q^6)(-5h^5)$

$$45h^8q^6$$

14.  $\frac{-5v^5b^2}{-8v^6b^3}$

$$\frac{5}{8vb}$$

15.  $\frac{(-2m^5i^5)(2)^3}{5m^6}$

$$\frac{-16i^5}{5m}$$

16.  $\frac{(-10r^6o^2)(-5r^5o^3)}{2r^2}$

$$25r^9o^5$$

17.  $(-2s^{-5}q^5)^5(-s^{-6}q^6)^5$

$$\frac{32q^{55}}{s^{55}}$$

18.  $(-8d^{-3}v^{-3})(-4d^{-5}v^{-5})(d^{-3})$

$$\frac{32}{d^{11}v^8}$$