

Q2 - Homework 7 - Worksheet 8-2/8-4

Date _____ Period _____

Simplify. Your answer should contain only positive exponents.

1) $2n \cdot 2n$

2) $x^2 \cdot 3x \cdot 2x^3$

3) $r^2 \cdot 2r^2$

4) $3a^3 \cdot a^2$

5) $x^2 \cdot 3x^3$

6) $n^3 \cdot 2n^2$

7) $(m^5 n^3)^5 \cdot -m^4 n^{-4}$

8) $(x^3 y^4)^0 \cdot -y^{-3}$

9) $(-x^2)^2 (x^3 y^0)^0$

10) $\frac{x^{-4}}{(-x^5)^{-2} \cdot x^{-3} y^{-1}}$

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

12) $\frac{(-x^2 y^{-2} \cdot -x^{-4} y^5)^{-1}}{-y^{-5}}$

13) $\frac{x^{-1} y^{-2} \cdot (-2y^0)^4}{(2y^{-3})^{-4}}$

14) $\frac{x^4 y^{-4}}{(2x^0 y^4)^{-2} \cdot -2y^2}$

15) $\frac{(2x^{-1} y^0 \cdot -x^0 y^4)^3}{-2y^{-2}}$

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

Name each polynomial by degree and number of terms. First degree = linear, Second degree = quadratic.

17) -1

18) $5x^2$

19) $-5x^3 + 2x^2 + 9x$

20) $v^2 + 7v$

Solve each system using elimination by substitution.

21) $-5x - 4y = -22$
 $y = 6x + 20$

22) $5x + 5y = 5$
 $y = -6x + 1$

23) $y = 4x + 14$
 $-4x - 3y = -10$

Solve each system using elimination by addition.

24) $3x - y = 1$
 $9x - 9y = -27$

25) $-4x - 2y = 0$
 $-8x - 5y = 4$