

# Quiz Review

## 8-1 through 8-3

$$1.) (-5x^2y)(3x^4)$$

$$-15x^6y$$

$$2.) (-15xy^4)\left(-\frac{1}{3}xy^3\right)$$

$$5x^2y^7$$

$$3.) \left(\frac{2}{3}P\right)^2$$

$$\frac{4}{9}P^2$$

$$4.) (0.2a^2b^3)^2$$

$$.04a^4b^6$$

$$5.) [(4^2)^3]^2$$

$$4^{12}$$

$$6.) \frac{p^4 n^4}{p^2 n}$$

$$p^2 n^3$$

$$7.) \quad \frac{x^4}{x^{-2}} = \frac{x^{4 \cdot 1}}{x^{-2}} \quad \boxed{x^6}$$

$4 + -2$

$$8.) \quad \left( \frac{2a^2b}{a} \right)^3 = \frac{8a^6b^3}{a^3} = \boxed{8a^3b^3}$$

$$9.) \left( \frac{4 \text{ m}^2 \text{ h}^2}{8 \text{ m}^{-1} \text{ l}} \right)^0 = 1$$

$$10.) \frac{(3 \text{ st})^2 \text{ u}^{-4}}{\text{ s}^{-1} \text{ t}^2 \text{ u}^7} = \frac{9 \text{ s}^2 \text{ t}^2 \text{ u}^{-4}}{\text{ s}^{-1} \text{ t}^2 \text{ u}^7}$$

$$\begin{aligned} 2 + (-1) &= 3 \\ -4 - 7 &= -11 \end{aligned}$$

$$= \frac{9 \text{ s}^3}{\text{ u}^{11}}$$

11.)  $13,400,000,000$

$1.34 \times 10^{10}$

12.)  $.0000096$

$9.6 \times 10^{-6}$

13.)  $4.5 \times 10^6$

4,500,000

14.)  $9.12 \times 10^{-5}$

.0000912



$$15.) (3.9 \times 10^3) (4.2 \times 10^{-11})$$

$$16.38 \times 10^{-8} (+1)$$

$$1.638 \times 10^{-7}$$

$$16.) (6.2 \times 10^4) (4.1 \times 10^2)$$

$$25.42 \times 10^6 (+1)$$

$$2.542 \times 10^7$$

17.)

$$\frac{9.72 \times 10^7}{0.6 \times 10^3}$$

$$1.62 \times 10^4 (+1)$$

$$1.62 \times 10^5$$

18.)

$$\frac{4 \times 10^{-4}}{2.5 \times 10^2}$$

$$1.6 \times 10^{-6}$$