

8.2.4

HWK

8-109)

$$a) \frac{(3 \times 10^2)(2 \times 10^3)}{6 \times 10^5}$$

$$b) \frac{(2.75 \times 10^{-2})(2.5 \times 10^8)}{6.875 \times 10^6}$$

$$c) \frac{28 \times 10^{12}}{14 \times 10^7} = 2 \times 10^5$$

8-110)

$$a) (x^2)(x^5) = x^7$$

$$b) \frac{y^7}{y^4} = y^3$$

$$c) x^3 \cdot x^4 = x^7$$

8-111)

a) positive

b) none

c) positive

d) negative

8-112)

$$\begin{array}{cc} 4'' & \times & 6'' \\ \text{tall} & & \text{wide} \\ \downarrow \times 8 & & \downarrow \times 8 \end{array}$$

$$a) 32'' \times 48''$$

$$\begin{array}{cc} 4'' & \times & 6'' \\ \text{tall} & & \text{wide} \\ \downarrow \div 2.6 & & \downarrow \div 2.6 \end{array}$$

$$b) 1.5'' \times 2.25''$$

8-113)

a) \approx \$40 after 2 wks

b) \approx \$55, draw a trend line
and read from the y-axis

c) \approx \$75, extend the trend line

8-114)

12 doz. cookies
3 lbs. flour

$$a) \frac{12}{3} = \frac{18}{x}$$

$$\frac{12x}{12} = \frac{54}{12}$$

$x = 4.5$ pounds of flour

$$b) \frac{12}{3} = \frac{x}{10}$$

$$\frac{3x}{3} = \frac{120}{3}$$

$x = 40$ dozen cookies