

Chapter 3 Test

1a. $r - 2$

1b. $3xy$

1c. $x + 100$

2. $51,000 - e =$ husband's yearly earnings

3a. $\frac{x-16}{x}$ for $x = 4$

$$\begin{aligned}\frac{4-16}{4} &= \frac{4+(-16)}{4} \\ &= \frac{-12}{4} \\ &= -3\end{aligned}$$

3b. $2t^2 - 3(t-s)$ for $t = -2, s = 4$

$$\begin{aligned}2(-2)^2 - 3(-2-4) \\ &= 2(-2)^2 - 3(-2+[-4]) \\ &= 2(-2)^2 - 3(-6) \\ &= 2(4) - 3(-6) \\ &= 8 - (-18) \\ &= 8 + 18 \\ &= 26\end{aligned}$$

3c. $-a^2 + 10$ for $a = -3$

$$\begin{aligned}-(-3)^2 + 10 &= -9 + 10 \\ &= 1\end{aligned}$$

4. DISTANCE TRAVELED

Traveling from 9AM to noon means traveling for 3 hours.

$$d = rt$$

$$d = (55)(3)$$

$$d = 165$$

The motorist traveled 165 miles.

