

Additional test review problems.

1) A) (x) time in hours (y) amount of water in the pool in gallons

B) (2, 12000) (6, 15000)

$$m = 750$$

$$y - 12000 = 750(x - 2)$$

$$y - 12000 = 750x - 1500$$

$$y = 750x + 10,500$$

c) (0, 10,500) There are 10,500 gallons of water when you began filling the pool with more water

d) 750 gallons per hour. For each hour that passes you add an additional 750 gallons of water.

$$e) 16000 = 750x + 10,500$$

$$x = 7.3 \text{ hours}$$

2) A) \$125 per hour. For every hour the plumber works, you pay an additional \$125.

B) (0, 80). You pay \$80 for the plumber you hire before he starts working any hours.

$$c) C = 80 + 125t$$

$$3) A) m = \frac{480 - 120}{0 - 4} = -90 \quad V = 480 - 90t$$

$$B) V = 480 - 90(1) = \$390$$

c) -90 dollars per year. The iPhone depreciates \$90 per year

$$4) x + y = 3000$$

$$x = \$2050 \text{ invested in CD}$$

$$.04x + .02y = 101$$

$$y = \$950 \text{ invested in money market fund}$$

$$5) 100x + 350y = 1000$$

$$x = 3 \text{ apples}$$

$$24x + 14y = 100$$

$$y = 2 \text{ avocados}$$