

HW 35

1. $x \rightarrow$ toppings #
 $y \rightarrow$ total cost

$$y = 22 + 2.50x$$

$$39.50 = 22 + 2.50x$$

$$17.50 = 2.50x$$

$$7 = x$$

7 toppings

2. $x \rightarrow$ # of lbs
 $y \rightarrow$ total fee

$$y = 99 + 0.32x$$

$$y = 99 + 0.32(1400)$$

$$y = 547$$

\$547

3. $x \rightarrow$ OT hrs
 $y \rightarrow$ total

$$y - 832 = 24(x - 8)$$

$$y - 832 = 24x - 192$$

$$y = 24x + 640$$

4. $x \rightarrow$ years
 $y \rightarrow$ height

$$y - 40 = 2.5(x - 4)$$

$$y - 40 = 2.5x - 10$$

$$y = 2.5x + 30$$

$$y = 2.5(17) + 30$$

$$y = 72.5$$

72.5 ft

5. $x \rightarrow$ minutes
 $y \rightarrow$ depth

$$y = 480 - 40x$$

6. $x \rightarrow$ # of tickets
 $y \rightarrow$ total raised

$$y = 5.50x + 80$$

$$773 = 5.50x + 80$$

$$693 = 5.50x$$

$$126 = x$$

126 tickets