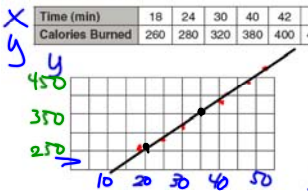
Warm-up (2.5 Worksheet)

3. HEALTH Alton has a treadmill that uses the time on the treadmill to estimate the number of Calories he burns during a workout. The table gives workout times and Calories burned for several workouts. Find an equation for and graph a line of regression. Then use the function to predict the number of Calories burned in a 60-minute workout.

Time (min)	18	24	30	40	42	48	52	60
Calories Burned	260	280	320	380	400	440	475	?



526.7

$m = \frac{360-260}{35-20}$

$m = \frac{100}{15} = \frac{20}{3}$

(20, 260) (35, 360)

x_1 y_1 x_2 y_2

$y - 260 = \frac{20}{3}(x-20)$

$y - 260 = \frac{20}{3}x - 133.3$

$+260 \quad +260$

$y = \frac{20}{3}x + 126.7$

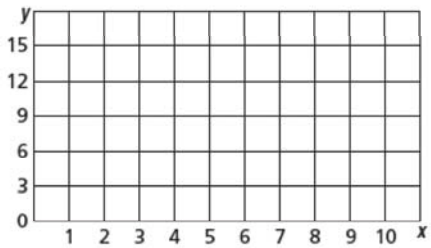
$y = \frac{20}{3}(60) + 126.7$

$y = 526.7$

Extra examples (2.5 Worksheet)

2

x	y
50	48

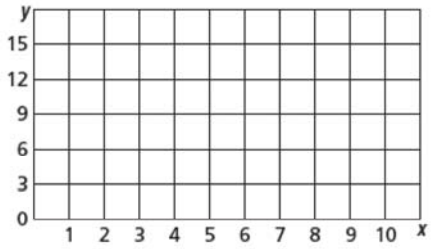


$y = \frac{4}{5}x + 8$

Extra examples (2.5 Worksheet)

1.

x	y



Start Around the Room Review

Homework - 2.5 Worksheet