

# Algebra 1 Bellwork Monday, February 1, 2016

Use this table and the graph given.

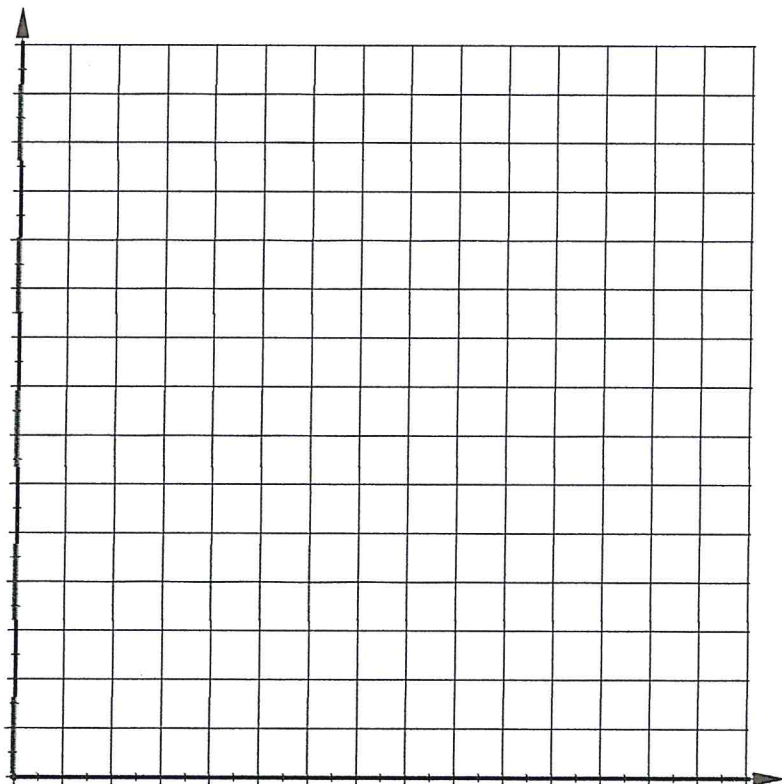
X	Respiration(breaths/min)	50	30	25	20	18	16	14
Y	Heart Rate (beats/min)	200	150	140	130	120	110	100

1. Make a scatter plot of this data.
2. Draw a trend line. A trend line is a single line that passes through the "middle" of the data.
3. Use this trend line to predict the Respiration for a Hear Rate of 180.
4. Pick two points on the trend line and write the equation of the trend line.

Points used:

Equation:

5. Use this equation to predict the Hear Rate for a Respiration of 70.



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Use this table and the graph given.

X	Respiration(breaths/min)	50	30	25	20	18	16	14
Y	Heart Rate (beats/min)	200	150	140	130	120	110	100

1. Make a scatter plot of this data.
2. Draw a trend line. A trend line is a single line that passes through the "middle" of the data.
3. Use this trend line to predict the Respiration for a Hear Rate of 180.

$$\approx 42 \text{ breaths/min}$$

4. Pick two points on the trend line and write the equation of the trend line.

Points used:

$$(25, 140)$$

$$(50, 200)$$

Equation:

$$m = \frac{200 - 140}{50 - 25} = \frac{60}{25} = 2.4$$

$$y - 140 = 2.4(x - 25)$$

$$y - 140 = 2.4x - 60$$

$$+140 \quad +140$$

5. Use this equation to predict the Hear Rate for a Respiration of 70.

$$y = 2.4x + 80$$

$$x = 70 \quad y = 2.4(70) + 80 = 248 \text{ beats/min}$$

