

Direct Variation Bell Work

Assume that y varies directly with x . Write an equation relating x and y in each case. Also, find the value of y when x is 10.

1) $y = 4$ when $x = 8$

2) $y = 15$ when $x = 3$

3) $y = -7.92$ when $x = 2.2$

4) $y = 1.85$ when $x = 0.925$

Direct Variation Bell Work**Answer Key**

Assume that y varies directly with x . Write an equation relating x and y in each case. Also find the value of y when x is 10.

1) $y = 4$ when $x = 8$

$$k = \frac{y}{x} = \frac{4}{8} = \frac{1}{2}$$

$$y = \frac{1}{2}x$$

When $x = 10$

$$y = \frac{1}{2}(10) = 5$$

2) $y = 15$ when $x = 3$

$$k = \frac{y}{x} = \frac{15}{3} = 5$$

$$y = 5x$$

When $x = 10$

$$y = 5(10) = 50$$

3) $y = -7.92$ when $x = 2.2$

$$k = \frac{y}{x} = \frac{-7.92}{2.2} = -3.6$$

$$y = -3.6x$$

When $x = 10$

$$y = -3.6(10) = -36$$

4) $y = 1.85$ when $x = 0.925$

$$k = \frac{y}{x} = \frac{1.85}{0.925} = 2$$

$$y = 2x$$

When $x = 10$

$$y = 2(10) = 20$$