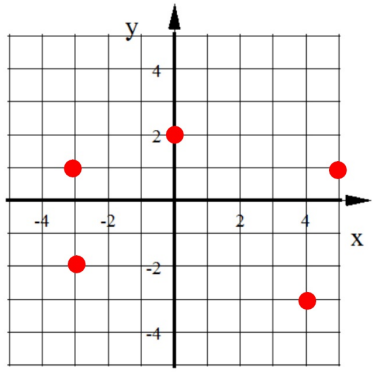
State the Domain and Range of this graph:



D: $-3, 0, 4, 5$

These are the x-coordinates written in order from left to right across the graph

R: $-3, -2, 1, 2$

These are the y-coordinates written in order from bottom to top

The point (4, -7) is on the graph of a direct variation relationship.

Write an equation for this Direct Variation.

$y = kx \rightarrow k = \frac{y}{x} = \frac{-7}{4}$

$y = -\frac{7}{4}x$

The data below comes from a Direct Variation relationship.

X	Y	$\frac{Y}{X}$
−5	−31.5	6.3
−2.4	−15.12	
4.5	28.35	
7	44.1	
11	69.3	

1. Write a Direct Variation Equation.

$y = kx$

$y = 6.3x$

2. Find x when y = 30

Use the Direct Var. Eq from #1

$30 = 6.3x$

$4.76 = x$

Or use a Proportion

$\frac{-31.5}{-5} = \frac{30}{x}$

3. Find y when x = 20

If you the Dir. Var. Eq from #1 replace x with 20.

$y = 6.3(20) = 126$