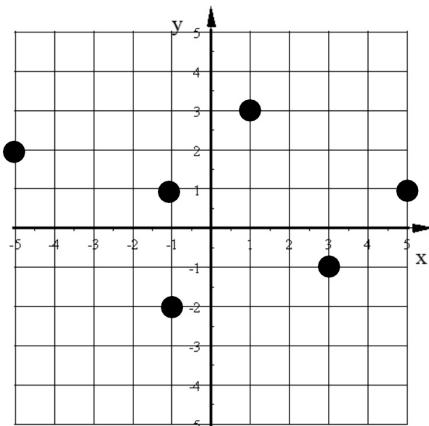


Solve.

$$5(R+3) - 7(R+2) \geq 23$$

$$\begin{aligned} 5R + 15 - 7R - 14 & \geq 23 \\ -2R + 1 & \geq 23 \\ -2R & \geq 22 \\ R & \leq -11 \end{aligned}$$

State the Domain and Range of this graph



Domain:

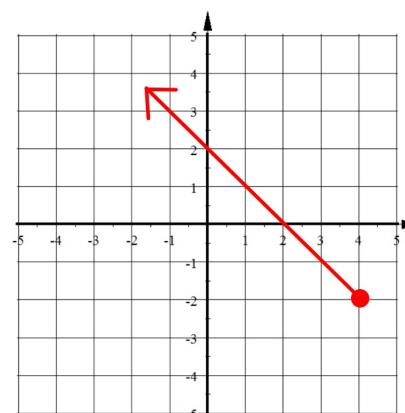
-5, -1, 1, 3, 5

Range:

-2, 1, 1, 2, 3

~~$$\begin{aligned} 6(m+3) - 2(m-4n) + 8(6m-5n) + \frac{7}{3}(12m+9n) \\ 6m + 18 - 2m + 8n + 48m - 40n + 28m + 18 - 11n \\ 80m + 18 - 11n \end{aligned}$$~~

State the Domain and Range of this graph



Domain: $x \leq 4$

Range: $y \geq -2$

Use these functions:

$$g(x) = 2x + 3$$

$$\begin{array}{l} 2(z) + 3 \\ \hline 1 = 7 \end{array}$$

$$h(w) = w^2 - 4$$

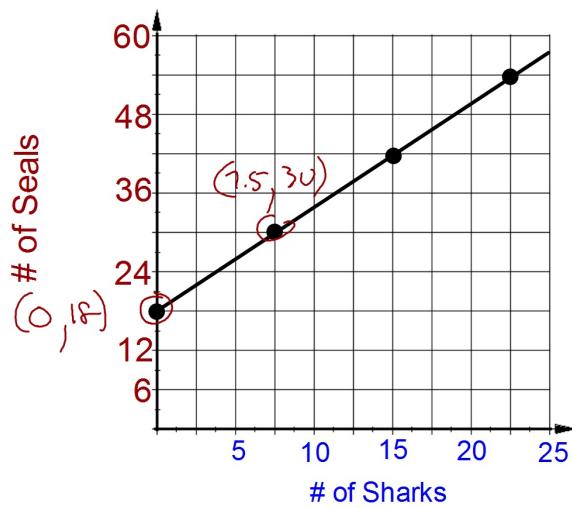
$$\begin{array}{l} 9 - 4 \\ \hline z = 5 \end{array}$$

$$m(p) = \frac{p+4}{3}$$

$$\begin{array}{l} 17+4 \\ \hline 3 = 21 \\ \hline 3 = 7 \end{array}$$

Find the value of:

$$\begin{aligned} 5g(2) - 2h(3) + 10m(17) \\ 5(2) - 2(9) + 10(17) \\ 10 - 18 + 170 \\ = 192 \end{aligned}$$



$$\frac{\Delta y}{\Delta x} = \frac{30 - 18}{7.5 - 0} = \frac{12}{7.5}$$

1.6 seals/shark

Find the rate of change. Include units.

Rate of Change is slope with units.

Elephants	Gallons of Water
14	893
20	1217
25	1487

$$\begin{aligned} \Delta y &= 1217 - 893 \\ &= 324 \\ \frac{324}{6} &= 54 \end{aligned}$$

54 gallons/elephant

Write the equation of the line that passes through these two points in Slope-Intercept Form,

(-8, 17) & (4, 8)

Take the slope and one of the points, write the equation in Point-Slope Form then change it into Slope-Intercept Form

$$\begin{aligned} m &= \frac{17 - 8}{-8 - 4} = \frac{9}{-12} \\ m &= -\frac{3}{4} \end{aligned}$$

$$y - 8 = -\frac{3}{4}(x - 4)$$

$$y - 8 = -\frac{3}{4}x + 3 + 8$$

$$y = -\frac{3}{4}x + 11$$