

What you will learn about:
Functions

Function

$$f(x)$$

Read f of x

Given the functions: $f(x) = 2x - 5$, $\underline{g(x) = -3x + 9}$, and $h(x) = \underline{x^2 - 3x + 6}$

Evaluate the following:

$$\begin{aligned} f(6) &= 2(6) - 5 \\ &= 12 - 5 \\ &= 7 \end{aligned}$$

$$\begin{pmatrix} 6, 7 \\ f(-1) \end{pmatrix}$$

$$\begin{aligned} f(-1) &= 2(-1) - 5 \\ &= -2 - 5 \\ &= -7 \end{aligned}$$

$$\begin{aligned} g(-3) &= -3(-3) + 9 \\ &= 9 + 9 \\ &= 18 \end{aligned}$$

$$g(7) = -3(7) + 9$$

$$= -21 + 9$$

$$= -12$$

$$\begin{aligned} h(2) &= 2^2 - 3(2) + 6 \\ &= 4 - 6 + 6 \\ &= 4 \end{aligned}$$

$$\begin{aligned} h(-4) &= (-4)^2 - 3(-4) + 6 \\ &= 16 - (-12) + 6 \\ &= 28 + 6 \\ &= 34 \end{aligned}$$

$$\begin{aligned} g(2) &= -3(2) + 9 \\ &= 3 \end{aligned}$$

$$\begin{aligned} f(4) &= 2(4) - 5 \\ &= 3 \end{aligned}$$

$$\begin{aligned} h(1) &= 1^2 - 3(1) + 6 \\ &= 1 - 3 + 6 \\ &= 4 \end{aligned}$$

$$\begin{aligned} g(4) &= -3(4) + 9 \\ &= -12 + 9 \\ &= -3 \end{aligned}$$

$$g(x) - f(x)$$

$$\begin{aligned} f(0) - h(3) &= 2(0) - 5 \\ &= -5 \end{aligned}$$

$$-5 - 6 = -11$$

$$h(x) - g(x)$$

$$h(3)$$

$$\begin{aligned} 3^2 - 3(3) + 6 &= 9 - 9 + 6 \\ &= 6 \end{aligned}$$