

DRILL

D: $-4 < x \leq 6$ R: $-3 \leq y < 3$

(x-values)

① What is the domain and range of the function?

D: $(-4, 6]$ *

R: $[-3, 3)$

② Given: $f(x) = 3x^2 - 4x$

Evaluate: $f(-4)$

$$\begin{aligned} f(-4) &= 3(-4)^2 - 4(-4) \\ &= 3(16) + 16 \\ &= 64 \end{aligned}$$

$\circ \Rightarrow (,)$

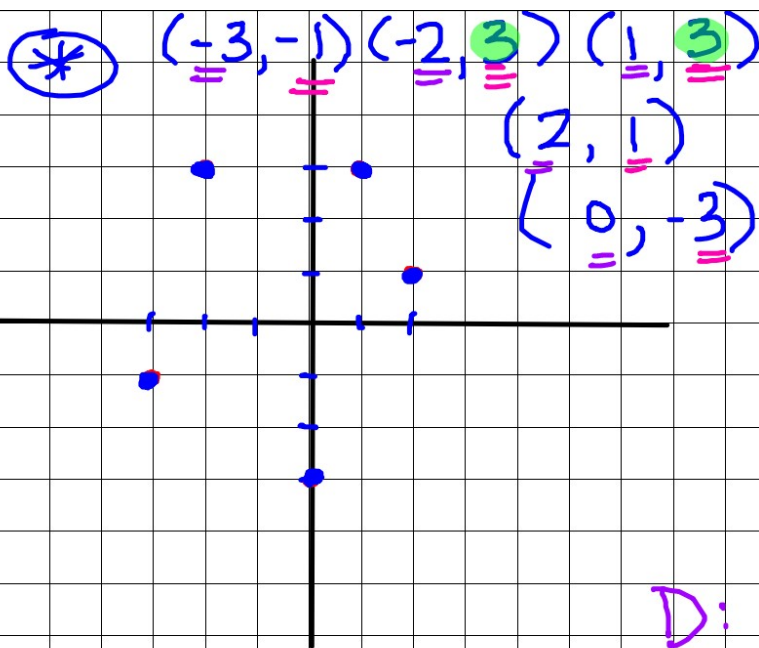
$\bullet \Rightarrow [,]$

$$f(x) = 3x^2 + 4x - 1$$

$$g(x) = \frac{-5x - 2}{2}$$

Evaluate:

$$\begin{aligned} & f(3) - g(-6) \\ &= \left[3(3)^2 + 4(3) - 1 \right] - \left[\frac{-5(-6) - 2}{2} \right] \\ & \quad \begin{array}{l} 3(9) + 12 - 1 \\ 27 + 12 - 1 \end{array} \quad \begin{array}{l} \frac{30 - 2}{2} \\ \frac{28}{2} \end{array} \\ &= 38 - 14 \\ &= 24 \end{aligned}$$



1) Do these points represent a function?

* Yes b/c it passes the vertical line test.

2) What is the domain & range

D: $-3, -2, 0, 1, 2$

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