Unit 5, Lesson 3

Using Function Notation

Let's use function notation to talk about points.

3.1 Which Three Go Together: Function Notation

Which three go together? Why do they go together?

A

$y = x$

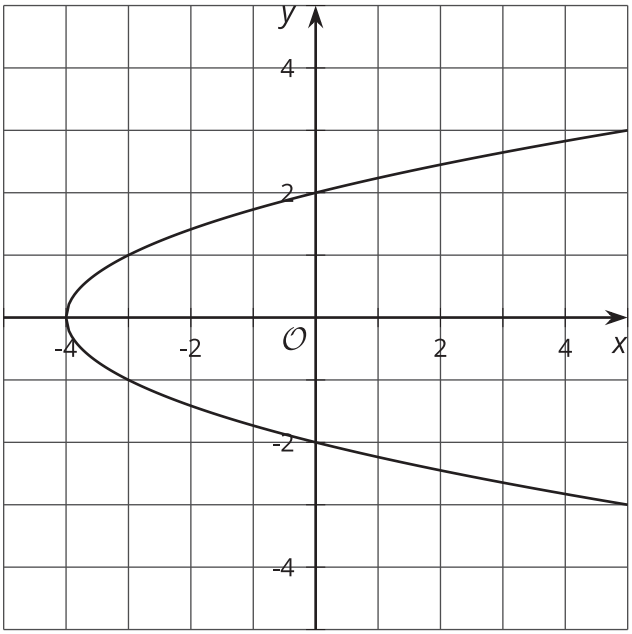
B

$(0, 2)$

C

$f(x) = x + 2$

D



3.2 Points into Function Notation and Back

1. A graph, representing the function $y = f(x)$, has these points. Write each of these coordinate pairs in function notation.

   a. $(2, 3)$

   b. $(-1, 4)$

   c. $(0, 3)$

   d. $(4, 0)$

   e. $\left(\frac{2}{3}, \frac{3}{4}\right)$

2. A function is given by the equation $h(x) = 5x - 3$. Given values in function notation, write the coordinate pair for the point on the graph associated with each of those values.

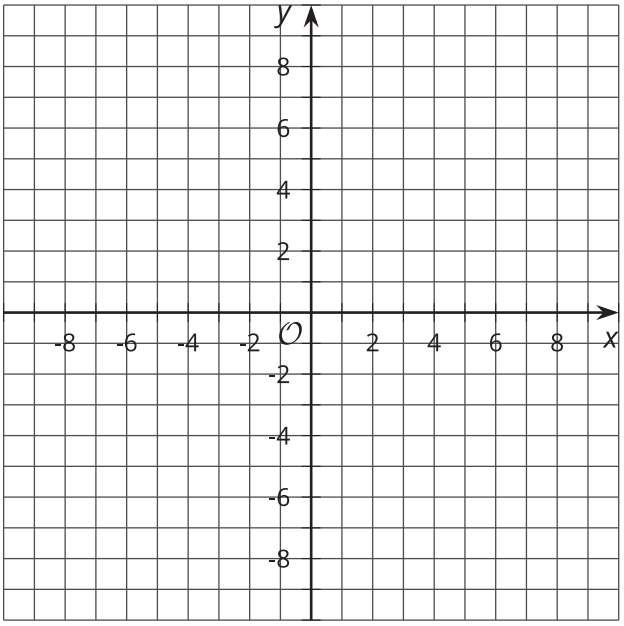
   a. $h(3)$

   b. $h(-4)$

   c. $h\left(\frac{2}{5}\right)$

3.3 A Graph with Properties

1. Draw a graph of a function $y = g(x)$ that has these properties:
   - $g(0) = 2$
   - $g(1) = 3$
   - $(2, 3)$ is on the graph
   - $g(5) = -1$



2. Han draws this graph for $g(x)$. What is the error?