

MA 109: August 28

Function Notation: Solving

Start of Class

Instructor Information

Name:

Email:

Office Hours:

Warm-up Questions

Notes

Example: Suppose $h(x) = 3x + 7$. Solve $h(x) = -2$.

↑ ↑
2 is the output
we need to find x

Strategy: $h(x) = 3x + 7$, so $h(x) = -2$ when $3x + 7 = -2$

$$3x + 7 = -2$$

$$\frac{3x}{3} = \frac{-9}{3}$$

Answer: $x = -3$

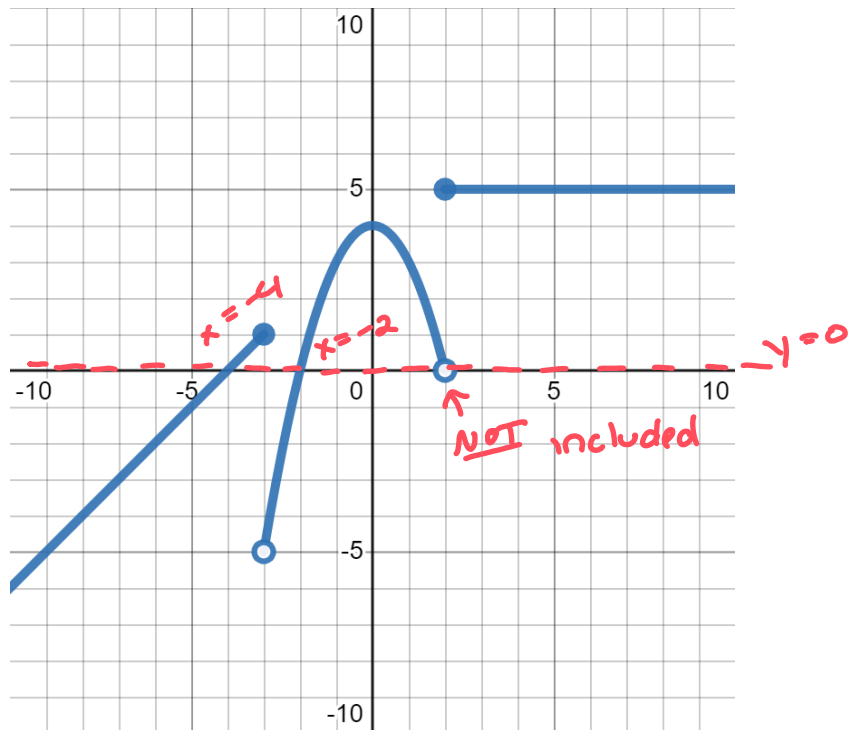
Example: Suppose $p(x)$ is given in the graph below. Solve $p(x) = 0$. ← 0 is the output

remember

x : input

y : output

Strategy: go along the y -axis to $y = 0$, then look left/right for the x -values (there might be more than one)



Answer: -2 and -4

2 is the output
↓

Example: Using the table below, solve $h(x) = 2$.

Strategy: find
2 in the
output column
for $h(x)$, then
the answer is
in the input
column

inputs	outputs for $g(x)$	outputs for $h(x)$
x	$g(x)$	$h(x)$
-3	6	3
-1	2	-3
2	5	7
3	4	2

answer: 3

End of Class

Write a summary of what you learned today:

What questions do you have about the material from today?

What do you need to do between now and the next class meeting?