

NAME:

Key

DATE:

A2.Q1.BERMEL:

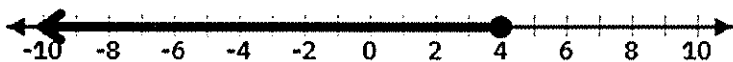
FUNCTIONS

(DAY F4)

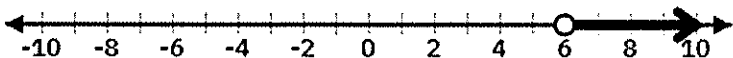
NOTES

Every graph highlights certain values of x by shading them on a number line.

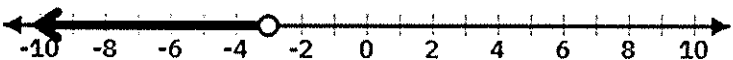
Write the inequality that represents the interval of shaded x -values.



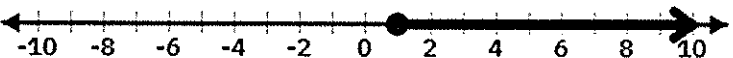
$$x \leq 4$$



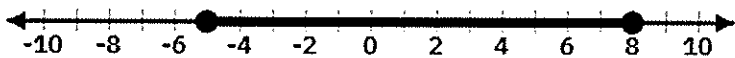
$$x > 6$$



$$x < -3$$



$$x \geq 1$$

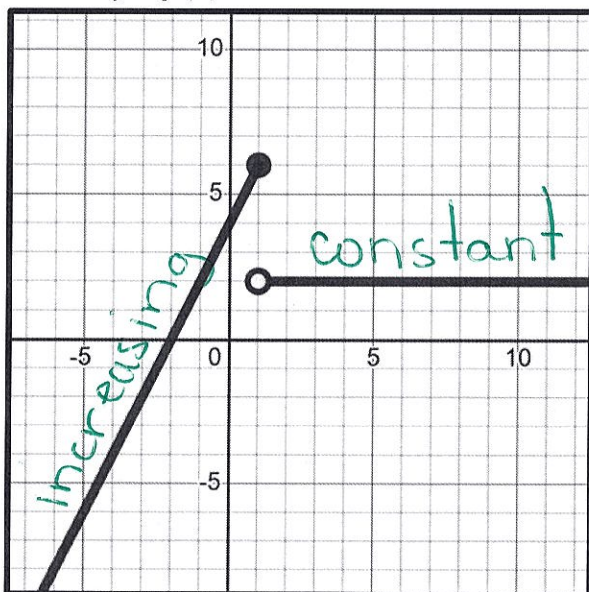


$$-5 \leq x \leq 8$$



$$-9 < x \leq 0$$

#1. Let $y = f(x)$



A. On what interval of x is the function decreasing?

never

B. On what interval of x is the function constant?

$x > 1$

C. On what interval of x is the function increasing?

$x \leq 1$

D. Find the "y-intercept" and show the function notation that leads to the answer.

$y = 4$

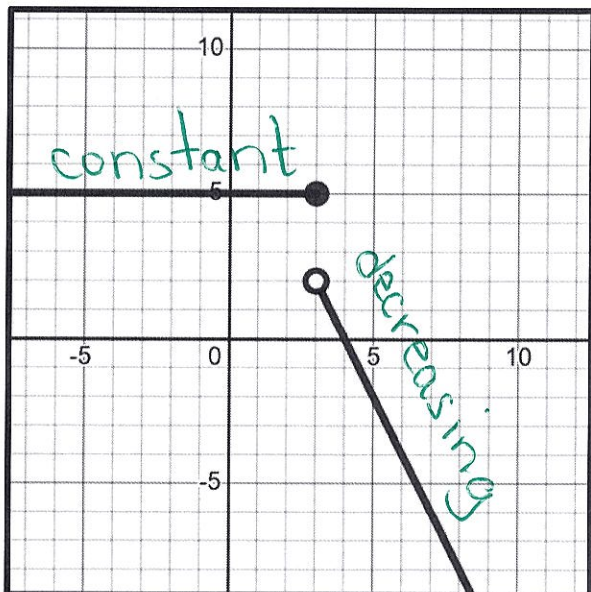
$f(0) = 4$

E. Find the zero(s) of the function and show the function notation that leads to the answer(s).

$x = -2$

$f(-2) = 0$

#2. Let $y = g(x)$



A. On what interval of x is the function decreasing?

$x > 3$

B. On what interval of x is the function constant?

$x \leq 3$

C. On what interval of x is the function increasing?

never

D. Find the "y-intercept" and show the function notation that leads to the answer.

$y = 5$

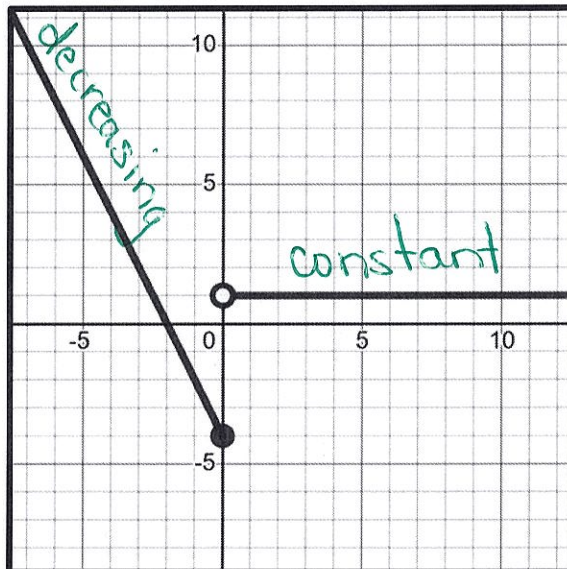
$g(0) = 5$

E. Find the zero(s) of the function and show the function notation that leads to the answer(s).

$x = 4$

$g(4) = 0$

#3. Let $y = f(x)$



A. On what interval of x is the function decreasing?

$$x \leq 0$$

B. On what interval of x is the function constant?

$$x > 0$$

C. On what interval of x is the function increasing?

never

D. Find the "y-intercept" and show the function notation that leads to the answer.

$$y = -4$$

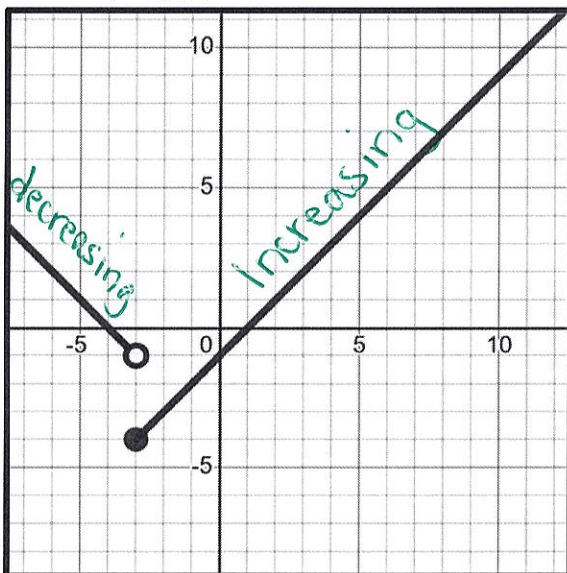
$$f(0) = -4$$

E. Find the zero(s) of the function and show the function notation that leads to the answer(s).

$$x = -2$$

$$f(-2) = 0$$

#4. Let $y = g(x)$



A. On what interval of x is the function decreasing?

$$x < -3$$

B. On what interval of x is the function constant?

never

C. On what interval of x is the function increasing?

$$x \geq -3$$

D. Find the "y-intercept" and show the function notation that leads to the answer.

$$y = -1$$

$$g(0) = -1$$

E. Find the zero(s) of the function and show the function notation that leads to the answer(s).

$$x = -4, x = 1$$

$$g(-4) = 0$$

$$g(1) = 0$$