

NAME:

DATE:

A2.Q1.BERMELLEEMBO:

FUNCTIONS

(DAY F5)

MASTERY PRACTICE

1. Consider the function: $f(x) = \frac{1}{2}x + 4$

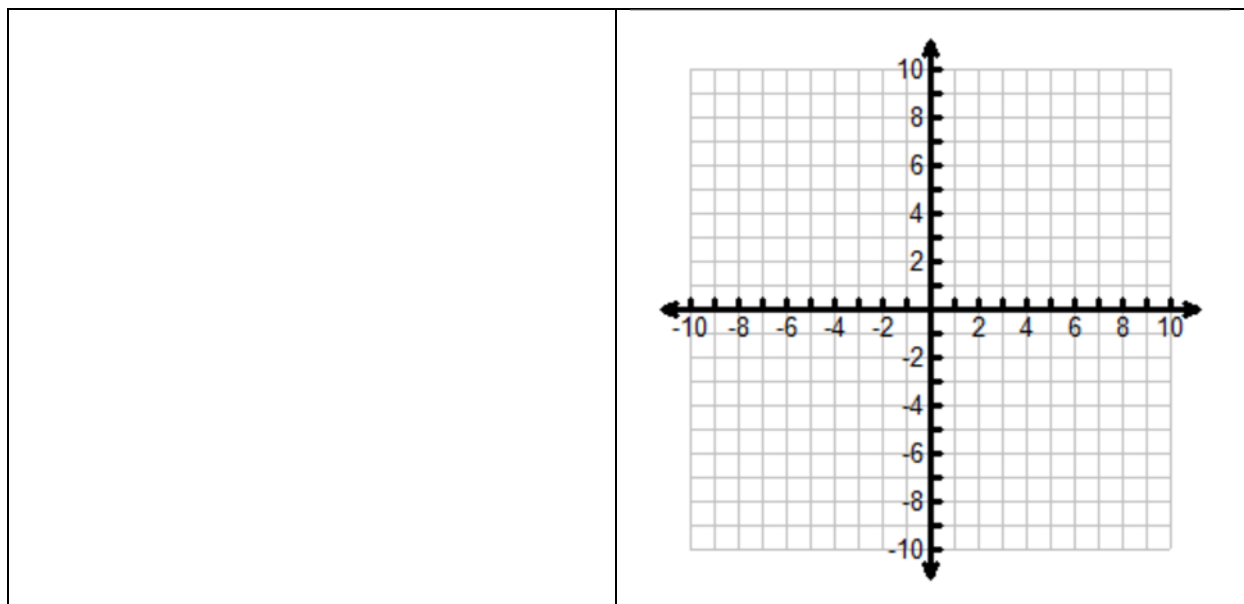
Let $y = f(x)$

A. Find $f(50)$

B. Find the y-intercept:

C. Is $x = -2$ a zero of the function? Show work.

D. Construct a table of values and graph the function.



E. Use the graph to determine the zero(s) of the function.

F. Is $(-12, -2)$ a point of the graph?

2. Consider the function: $f(x) = |x+3| - 4$

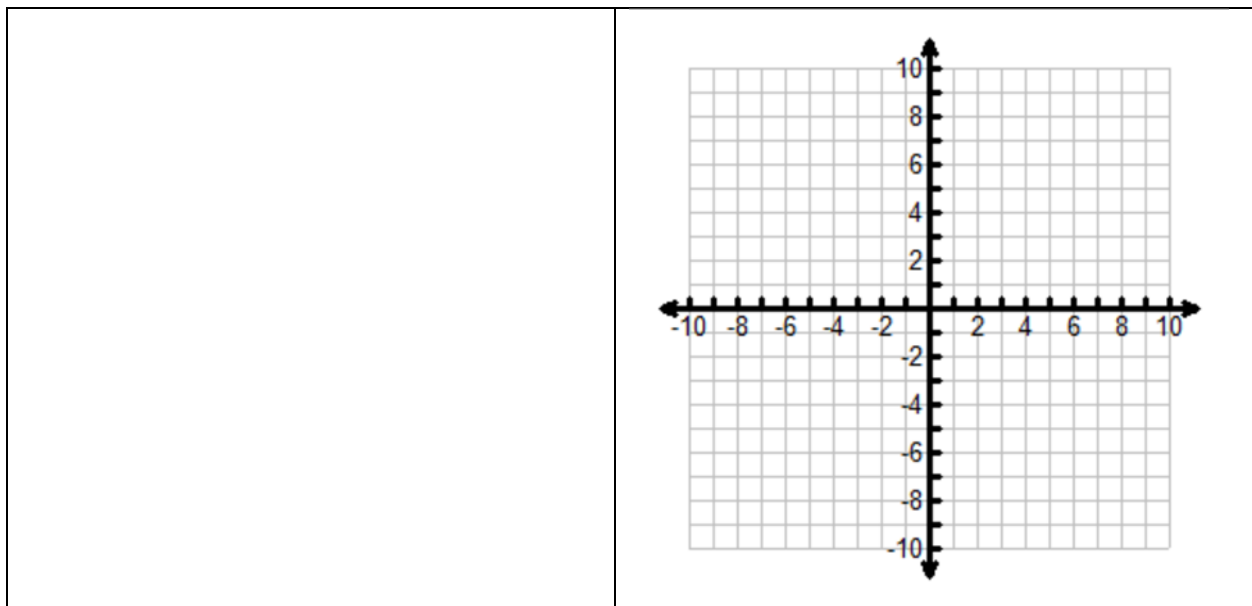
Let $y = f(x)$

A. Find $f(-25)$

B. Find the y-intercept:

C. Is $x = -3$ a zero of the function? Show work.

D. Construct a table of values and graph the function.



E. Use the graph to determine the zero(s) of the function.

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

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

3. Consider the function: $f(x) = -x^2 - 4x + 5$

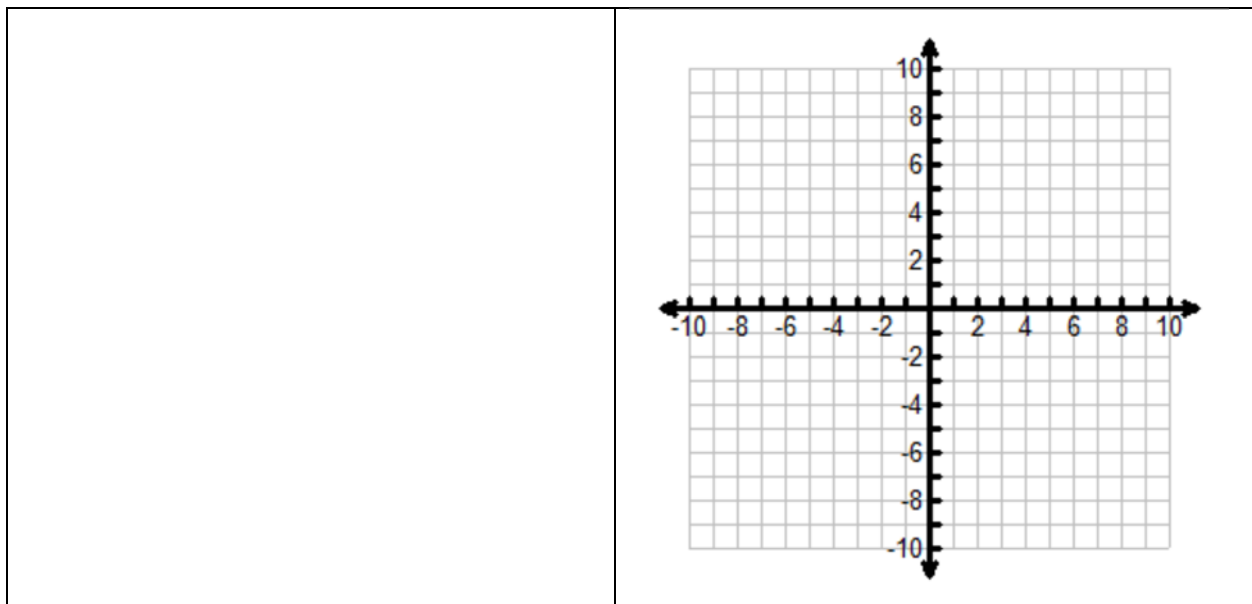
Let $y = f(x)$

A. Find $f(30)$

B. Find the y -intercept:

C. Is $x = -1$ a zero of the function? Show work.

D. Construct a table of values and graph the function.



E. Use the graph to determine the zero(s) of the function.

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

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

NOT YET 2425: 4. Consider the function: $f(x) = 0.5(x+2)(x-5)$

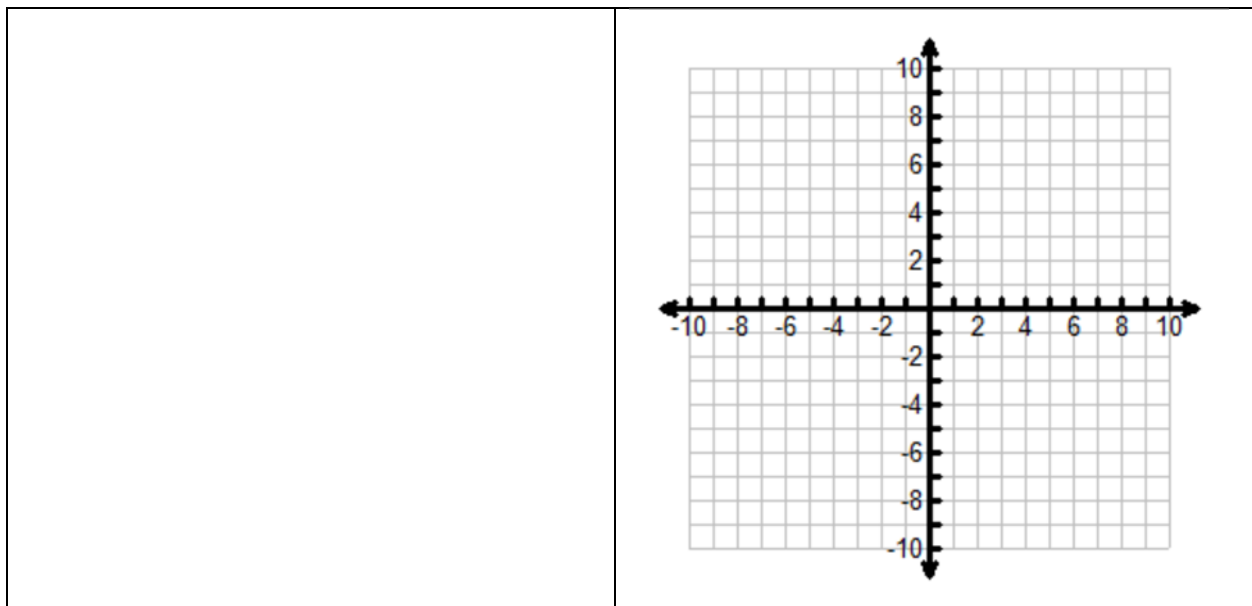
Let $y = f(x)$

A. Find $f(20)$

B. Find the y-intercept:

C. Is $x = -2$ a zero of the function? Show work.

D. Construct a table of values and graph the function.

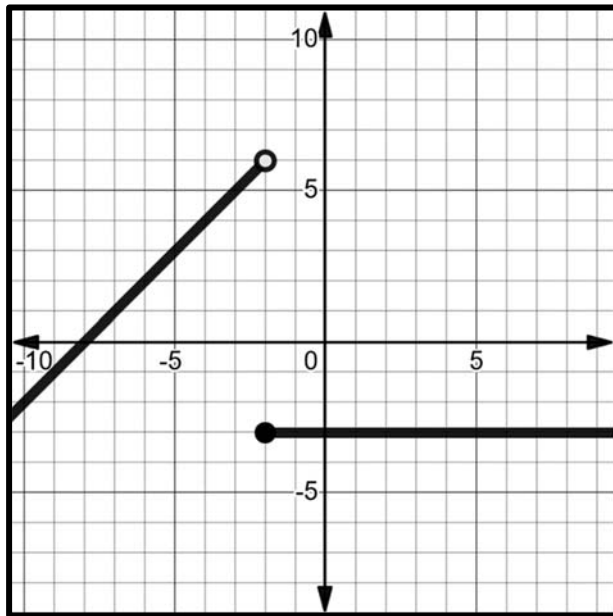


E. Use the graph to determine the zero(s) of the function.

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

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

NOT YET 2425: 5. Consider the graph of the function $y = f(x)$ shown below.



Evaluate each A - F

A. $f(-2)$

B. $f(8)$

C. $f(-7)$

D. Find the “y-intercept”. Show the function notation that leads to this answer.

E. Find the zero of the function. Show the function notation that leads to this answer.

F. Write a table of values for the answers found in parts A – H. (*Place this table next to the graph*)

G. The function is decreasing on what interval of x ?

H. The function is constant on what interval of x ?

I. The function is increasing on what interval?