

Bellwork

Alg 2A

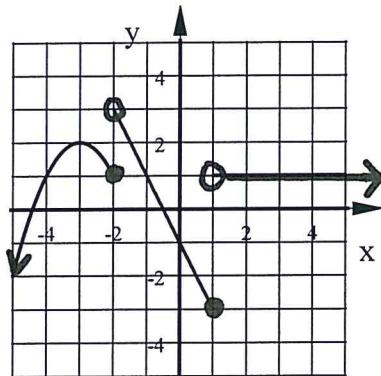
Tuesday, October 25, 2016

1. Use this function $f(x) = \begin{cases} 3x^2 + 6x - 1 & \text{if } x < -4 \\ 5 - 4x & \text{if } -4 \leq x < 5 \\ 12 & \text{if } x \geq 5 \end{cases}$

- a. Find $f(-3)$ b. Find $f(-6)$ c. Find $f(7)$

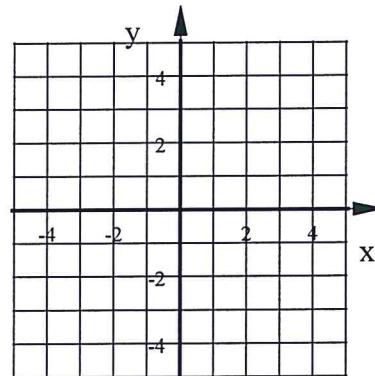
2. Use this graph.

- a) Find $f(-4)$ b) Find $f(1)$ c) Find $f(3)$



3. Graph this piecewise function

$$f(x) = \begin{cases} 2|x+2| - 4 & \text{if } -4 \leq x < 2 \\ -4x + 9 & \text{if } x \geq 2 \end{cases}$$



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Answers

1. Use this function $f(x) = \begin{cases} 3x^2 + 6x - 1 & \text{if } x < -4 \\ 5 - 4x & \text{if } -4 \leq x < 5 \\ 12 & \text{if } x \geq 5 \end{cases}$

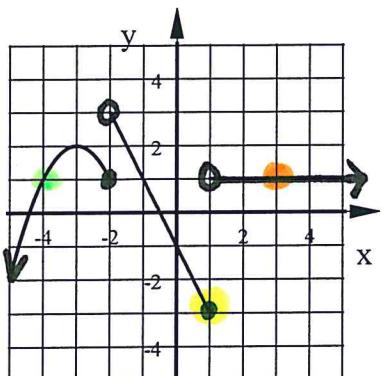
- a. Find $f(-3)$

$$3(-3)^2 + 6(-3) - 1 = 15$$

2. Use this graph.

- a) Find $f(-4)$

$$= 1$$



- b. Find $f(-6)$

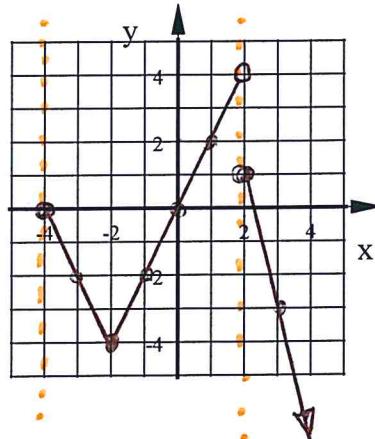
$$3(-6)^2 + 6(-6) - 1 = 71$$

- c) Find $f(3)$

$$= 1$$

3. Graph this piecewise function

$$f(x) = \begin{cases} 2|x+2| - 4 & \text{if } -4 \leq x < 2 \\ -4x + 9 & \text{if } x \geq 2 \end{cases}$$



X | Y
2 | 1
2 left 4 down

START AT (2, 1)
then use slope of -4