Algebra Quick Quiz

September 13,2019

Name.....Period.....

1. If f(x)= x^2 -2x-24 find the value of f(2)

2. Use your graphing calculator or go to www.desmos.com/calculator and graph the function: f(x)= x^2 -2x-24 and tell me what are the roots and vertex of the function.

3.If f(x)=x^2+2x-8.

- What are the zeros(roots) of the equation?
- What is the vertex of the equation

4. Name the roots of this polynomial:

$f(x) = (x + 4)(x + 2)(x - 1)$

5. Find the real roots, if any, of the following three functions.

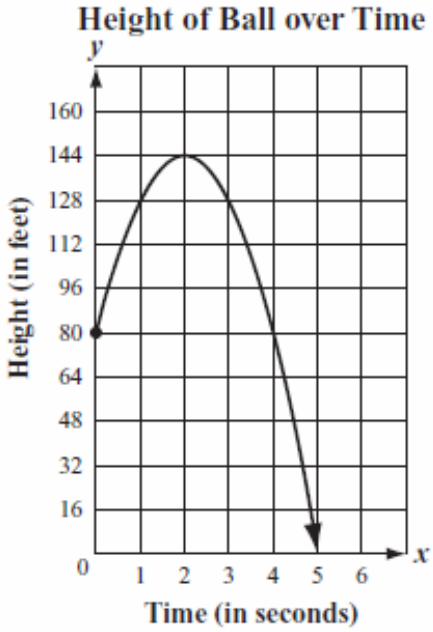
- f(x) = (x-6)^2 -9
- g(x)= (x+3)^2 -4
- h(x)=(x-2)^2 +8

6. . Find the vertex of each of the following three functions.

- f(x) = (x-6)^2 -9
- g(x)= (x+3)^2 -4
- h(x)=(x-2)^2 +8

7.

42 The graph below represents y, the height in feet of a ball, x seconds after the ball was thrown upward from a bridge that crosses a river.



a. What is the y-intercept of the graph? Show or explain how you got your answer.

b. What does the y-intercept represent in the context of this situation?

c. After how many seconds did the ball reach its maximum height? Show or explain how you got your answer.

d. What is the maximum height, in feet, the ball reached? Show or explain how you got your answer.

e. After how many seconds did the ball reach the surface of the river? Show or explain how you got your answer.