

NAME _____ DATE: _____ PERIOD: _____

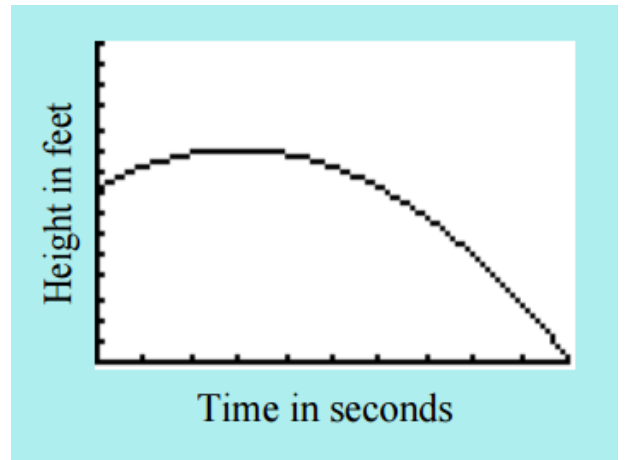
RETEST REVIEW: Quadratic Functions

1. Answer the following based on the graph.

A) What is the y-intercept? What does it represent?

B) What is the x-intercept? What does it represent?

C) Identify the vertex

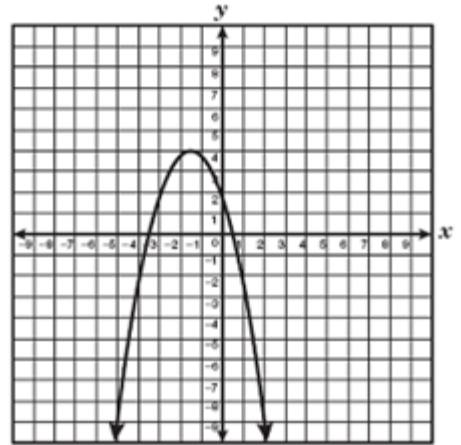


2. The area of a rectangle is represented by the equation $w^2 + 4w = 60$, where w is the width of the rectangle. Find the width.

3. Find the vertex of the quadratic function of $f(x) = -4x^2 + 12x - 5$.

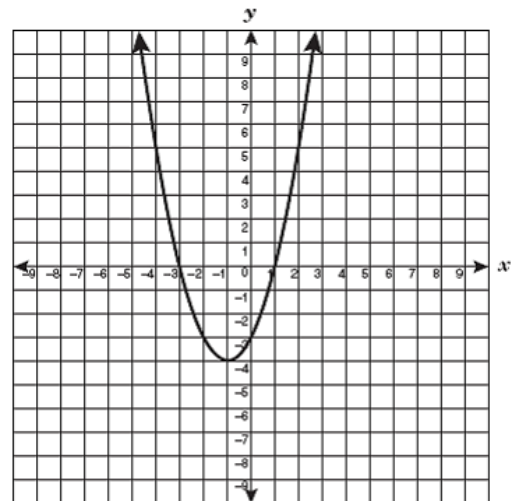
4. What are the solutions to the quadratic equation $x^2 - 3x - 15 = 0$?

5. What are the y-intercepts and x-intercepts of the graph below. Write these points as ordered pairs.



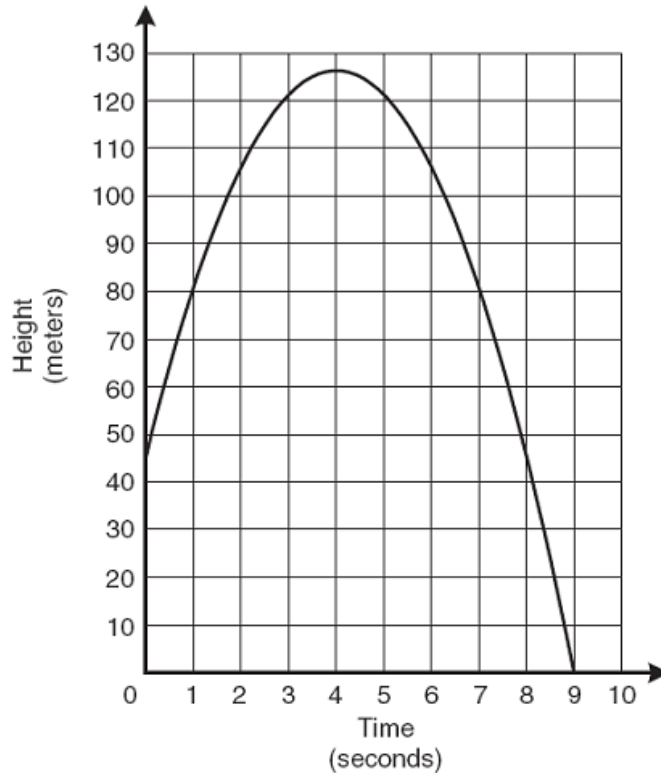
6. Using the graph in #5 find the equation for the axis of symmetry.

7. What are the roots of the quadratic function shown below?



8. Find the zeros of $f(x) = -4x + 8$.

The graph below show the height of a baseball from the time it is thrown from the top of a building until the time it hits the ground.



9. What conclusion can be made about the path of the baseball?

- A** The baseball reached its maximum height at 9 seconds.
- B** At 0 seconds, the baseball was 125 meters off the ground.
- C** The baseball was in flight for 4 seconds.
- D** The maximum height of the baseball was 125 meters.

10. At what time is the baseball at a height of 80 meters?

- A** 1 second
- B** 1 second and 7 seconds
- C** 1 second and 4 seconds
- D** 9 seconds

11. When did the baseball hit the ground?

- A** 125 seconds
- B** 9 seconds
- C** 4 seconds
- D** 45 seconds

12. Approximately how much time elapse while the baseball is 70 meters or more above the ground?

- A** 0.5 seconds
- B** 4 seconds
- C** 6.5 seconds
- D** 7 seconds