Student Name: _____

Student Instructions:

Test ID: 20014158

Description: 1920 Algebra I EOC Prep Touchstone Part 1 No Calcu

1. What is the solution of the equation $4(x + 4) - 1 = 3(x + 4) + 18$
   - A.   x = 15
   - B.   x = 19
   - C.   x = 25
   - D.   x = 45

2. The following represents a system of equations.

   $$2x + 5y = 2$$
   $$y = 2x + 10$$

   What is the solution to the system of equations?
   - A.   (1, 0)
   - B.   (–3, 4)
   - C.   (–4, 2)
   - D.   (6, –2)

3. What are the zeros of the equation $x^2 + 9x + 18 = 0$?
   - A. $x = 3$ and $x = 6$
   - B. $x = -3$ and $x = -6$
   - C. $x = 9$ and $x = 2$
   - D. $x = -9$ and $x = -2$

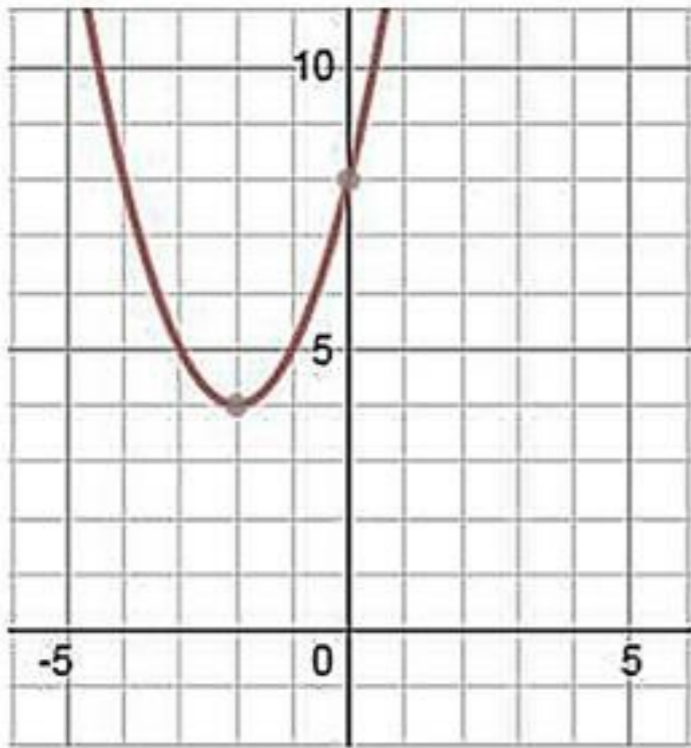4. Which sum is rational?
   - A. $\pi + 18$
   - B. $\pi + \sqrt{2}$
   - C. $\sqrt{3} + 5.5$
   - D. $\sqrt{25} + 1.75$

5.
   Find the sum of $\sqrt{32}$ and $\sqrt{8}$.

   - A. $2\sqrt{10}$

   - B. $6\sqrt{2}$

   - C. 12
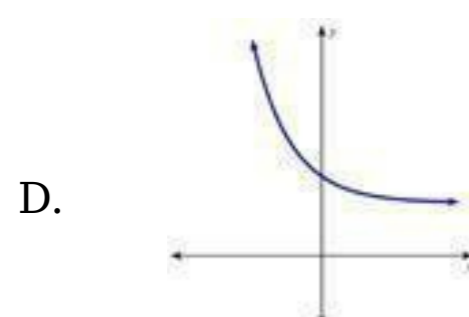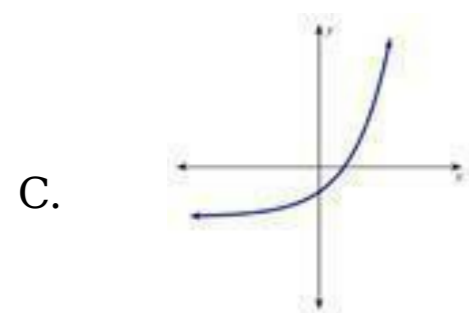
   - D. $20\sqrt{2}$

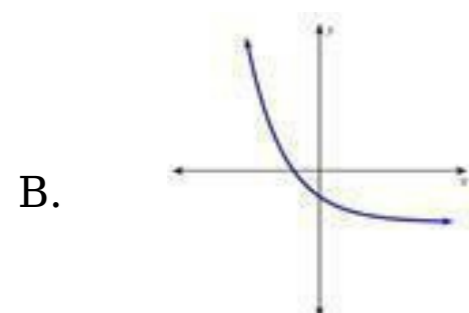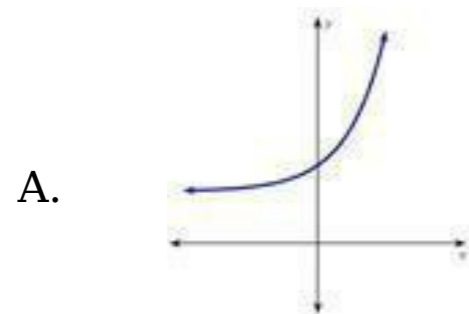**6.** Consider the following graph:

Which function is represented by the graph?

A. $y = x^2 + 4$
B. $y = (x - 2)^2 + 4$
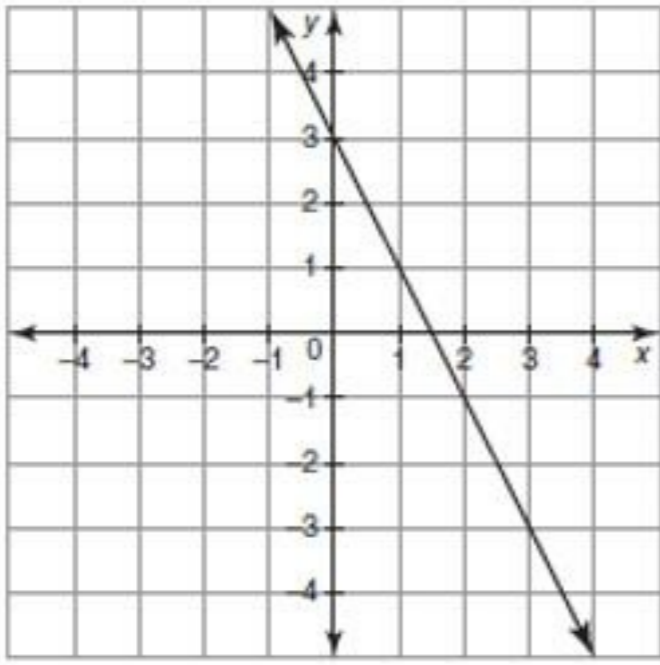C. $y = (x + 2)^2 + 4$
D. $y = (x + 4)^2 + 2$

7. What is the value of the function $f(x) = 2x^2 - 3x + 1$ evaluated at $x = 2$?

A. 0
B. 3
C. 6
D. 11

8. Which of the following could be the graph of $f(x) = 2^x - 1$?

A.

B.

C.

D.

9.

Which of the following equations represents the graph?

Write an equation for the graph.
- A. y = 2x + 3
- B. y = ½x + 3
- C. y = -2x + 3
- D. y = -½x + 3

10. Which of the following statements shows causation?
- A. An increase in rain fall and an increase in movie ticket sales.
- B. An increase in a child's weight and an increase in hours spent playing video games.
- C. An increase in monthly payments made on a loan and a decrease in the balance of the loan.
- D. A decrease in temperature and an increase in hot chocolate sales.