

NAME: _____

P.I. A.A.8: Analyze and solve verbal problems that involve quadratic equations

1. Which quadratic equation has 5 and -4 as its solutions?

[A] $x^2 + x - 20 = 0$ [B] $x^2 + 9x - 20 = 0$

[C] $x^2 - x + 20 = 0$ [D] $x^2 - 9x - 20 = 0$

[E] $x^2 - x - 20 = 0$

2. Which quadratic equation has -6 as its solution?

[A] $x^2 - 12x + 36 = 0$

[B] $x^2 - 12x - 12 = 0$

[C] $x^2 - 12x + 12 = 0$

[D] $x^2 - 12x - 36 = 0$

[E] $x^2 + 12x + 36 = 0$

3. The solutions to a quadratic equation are -4 and 8 . What is the quadratic equation?

4. Write a quadratic equation whose two solutions are opposite integers.

5. The only solution of a quadratic equation is 7 . What is the quadratic equation?

6. Write a quadratic equation that has only one solution.

[1] E

[2] E

[3] $x^2 - 4x - 32 = 0$

[4] Answers may vary. Sample: $x^2 - 16 = 0$

[5] $x^2 - 14x + 49 = 0$

[6] Answers may vary. Sample: $y = x^2 - 6x + 9$