Name: _____ Period: _____ Date: _____

Factoring to Solve Quadratic Equations Bell Work

1. **The solutions of a quadratic equation are also known as:**

   a. roots
   b. zeros
   c. both a and b
   d. None of these

2. **Write the following quadratic expression in two factors $y = 4x(x-1) - 2(x-1)$.**

   a. $y = (4x-1)(x-2)$
   b. $y = (4x-1)(x-1)$
   c. $y = -(4x-2)(x-1)$
   d. $y = (4x-2)(x-1)$

3. **Factor $y = x^2 - 6x + 8$**

   a. $y = (x-2)(x-4)$
   b. $y = -(x+2)(x-4)$
   c. $y = (x-2)(x+4)$
   d. $y = -(x-2)(x-4)$

4. **Factor $y = 12x^2 - 3x - 9$.**

   a. $y = 12x(x-9)$
   b. $y = 3(x-1)(4x+3)$
   c. $y = 3(x-1)(4x-3)$
   d. $y = 3(-x-1)(4x+3)$

5. **Write this quadratic expression in two factors, $y = 2x^2 - 8 + 4x - 8$.**

   a. $y = (2x-4)(x-2)$
   b. $y = (x-4)(2x-8)$
   c. $y = (x-2)(2x+8)$
   d. $y = -(x-2)(2x+8)$

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Factoring to Solve Quadratic Equations Bell Work

Answers:

1. **both a and b**
2. $y = (4x - 2)(x - 1)$
3. $y = (x - 2)(x - 4)$
4. $y = 3(x - 1)(4x + 3)$
5. $y = (x - 2)(2x + 8)$