

Class 10 Mathematics - Quadratic Equations

Name: _____

Date: _____

Medium Worksheet 2

Questions

1. Find the roots of:
 $3x^2 - x - 2 = 0$
2. Find the roots of:
 $2x^2 + 5x - 3 = 0$
3. Find the roots of:
 $6x^2 - 7x + 2 = 0$
4. Find the roots of:
 $4x^2 - 4x + 1 = 0$
5. Which equation above has equal roots?
6. What is special about repeated roots?

Answer Key

1.

$$3x^2 - x - 2$$
$$= (3x + 2)(x - 1)$$

$$\text{Roots} = 1, -2/3$$

2.

$$2x^2 + 5x - 3$$

$$= (2x - 1)(x + 3)$$

$$\text{Roots} = 1/2, -3$$

3.

$$6x^2 - 7x + 2$$

$$= (3x - 2)(2x - 1)$$

$$\text{Roots} = 2/3, 1/2$$

4.

$$4x^2 - 4x + 1$$

$$= (2x - 1)^2$$

$$\text{Roots} = 1/2, 1/2$$

5. Question 4

6. Both roots are identical.

