

MAGDY BKHEET

NO 2007446

Quadratic equations

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(1)

$$x^2 + 10x + 21 = 0$$

$$(x+7)(x+3) = 0$$

$$\therefore x = -7 \quad x = -3$$

find the Two solutions of following quadratic equations

$$(1) \quad 14x^2 + 3x = 11$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-3 \pm \sqrt{9 + 616}}{56}$$

$$x = \frac{-3 \pm \sqrt{625}}{56}$$

$$\therefore x = \frac{-3 \pm 25}{56}$$

$$x = \frac{-3 + 25}{56}$$

$$\therefore x = \frac{-3 + 25}{56} \quad \therefore x = 0.39$$

$$x = \frac{-3 - 25}{56} \quad \therefore x = \frac{-28}{56}$$

$$\therefore x = -0.5$$

(2)

$$x^2 - 3x + 2 = 0$$

$$(x-1)(x-2)$$

$$x-1=0 \quad x-2=0$$

$$\therefore x = 1 \quad \therefore x = 2$$

(3)

$$x^2 + 12x + 20 = 0$$

$$(x+10)(x+2)$$

$$x+10=0 \quad x+2=0$$

$$\therefore x = -10 \quad \therefore x = -2$$

(4)

$$x^2 - 64 = 0$$

$$(x+8)(x-8)$$

$$\therefore x = -8 \quad \therefore x = +8$$

(5)

$$2x^2 + 9x + 10 = 0$$

$$(2x+4)(x+2.5)$$

$$2x(x+2) + 5(x+2)$$

$$(x+2)(2x+5)$$

$$x = -2$$

$$x = -\frac{5}{2}$$