

• 1v5

OKD

✓  $9/12 > a$  (1,0)

$$a+b+c=0 \rightarrow \gamma - \gamma + a = 0 \rightarrow a = 1 \rightarrow x = \frac{1}{\gamma}, 1$$

4

$$\rightarrow (x - \frac{1}{4})^2 = \frac{1}{5} \rightarrow x - \frac{1}{4} = \pm \sqrt{\frac{1}{5}} \rightarrow x = \pm \sqrt{\frac{1}{5}} + \frac{1}{4} \checkmark$$

$$\rightarrow \cancel{r} \sqrt{r} \quad \frac{r + \cancel{r} \sqrt{r}}{r}, \frac{r - \cancel{r} \sqrt{r}}{r} \quad (\text{y})$$

$$\frac{-1 \pm \sqrt{14}}{2} \quad \checkmark$$

$$\frac{-b \pm \sqrt{\Delta}}{2a}$$

$$\Delta \rightarrow b^2 - 4ac$$

$$\text{الف} \rightarrow x^2 - 11x + 18 = 0 \quad (x-7)(x-2)$$

$$\text{ب} \rightarrow 7, 2 \quad \checkmark$$

(2)

$$\rightarrow x^2 + 13x - 18 = 0 \quad (x-2)(x+9)$$

$$\text{ب} \rightarrow +9, -2 \quad \checkmark$$

$$\text{الف} \rightarrow 5x^2 - 12x + 7 = 0 \rightarrow x^2 - 12x + 14 = 0 \quad (x-7)(x-2)$$

$$(x-7)(x-2)$$

$$x = \frac{12 \pm \sqrt{144 - 56}}{10} = \frac{12 \pm \sqrt{88}}{10}$$

$$x = \frac{12 \pm 2\sqrt{22}}{10} = \frac{6 \pm \sqrt{22}}{5}$$

(1)

$$\rightarrow 3x^2 - 10x + 7 = 0 \rightarrow x^2 - 10x + 21 = 0 \quad (x-7)(x-3)$$

$$\text{ب} \rightarrow x = \frac{10 \pm \sqrt{100 - 84}}{2} = \frac{10 \pm \sqrt{16}}{2}$$

$$x = \frac{10 \pm 4}{2} = 7, 3$$

$$\Delta \rightarrow b^2 - 4ac$$

$$\frac{-b \pm \sqrt{\Delta}}{2a}$$

$$a+b+c=0 \rightarrow \frac{1}{1} \leq 1 \quad \checkmark$$

$$a+c=b \rightarrow -1 \leq -\frac{1}{1} \quad \checkmark$$

(1,5)

$$\Delta \rightarrow b^2 - 4ac \rightarrow 14 = 14$$

$$\frac{10 \pm \sqrt{16}}{2}$$

$$\Delta \rightarrow 14 - 4(1)(1) = 10$$

$$\frac{-1 \pm \sqrt{10}}{1}$$

$$\Delta = -9 \rightarrow \Delta < 0 \rightarrow \text{لا يوجد حلا حقيقي}$$

(1)

$$\text{الف} = 5^2 - 2p \rightarrow 9 - 2(-2) = 13 \quad \checkmark$$

(2)

$$\frac{-b}{a} = 5$$

$$\frac{c}{a} = p$$

$$5 = \frac{10}{2} = 5$$

$$p = \frac{-2}{1} = -2$$

$$\rightarrow 5 - 10p \rightarrow 14 - 10(-2) = 34$$

$$\text{الف} = \binom{9}{5} + \binom{9}{4} \rightarrow \binom{9}{5} = \frac{9!}{5!4!} = \frac{9 \times 8 \times 7 \times 6}{4 \times 3 \times 2 \times 1} = 126$$

$$\binom{a}{b} = \frac{a!}{b!(a-b)!}$$

(2)

$$\binom{9}{4} = \frac{9!}{4!5!} = \frac{9 \times 8 \times 7 \times 6}{4 \times 3 \times 2 \times 1} = 126$$

$$\rightarrow \binom{9}{5} - \binom{9}{4} = 126 - 126 = 0$$

$$\binom{9}{4} = \frac{9!}{4!5!} = \frac{9 \times 8 \times 7 \times 6}{4 \times 3 \times 2 \times 1} = 126$$