

الف) $x^2 - 11x + 28 = 0$ $(x-4)(x-7) = 0$ $\underline{x=4}, \underline{x=7}$	ب) $x^2 + 3m - 28 = 0$ $(x-4)(x+7) = 0$ $\underline{x=4}, \underline{x=-7}$	8
الف) $x^2 - 12m + 5 = 0$ $x^2 - 12m + 5 = 0$ $(x-5)(x-1) = 0$ $\underline{x=5}, \underline{x=1}$	ب) $x^2 - 10x + 21 = 0$ $x^2 - 10x + 21 = 0$ $(x-3)(x-7) = 0$ $\underline{x=3}, \underline{x=7}$	7
الف) $2m^2 - 5m + 3 = 0$ جداول $\rightarrow 2 - 5 + 3 = 0$ $\frac{b}{a} = \frac{-5}{2} \rightarrow \frac{c}{a} = \frac{3}{2}$ ب) $2x^2 + 5x + 3 = 0$ جداول $\rightarrow 2 + 3 = 5$ $\frac{b}{a} = \frac{-5}{2} \rightarrow \frac{c}{a} = \frac{3}{2}$	ج) $2m^2 - 5m + 1 = 0$ $\Delta = b^2 - 4ac = 25 - 4 \times 2 \times 1 = 17$ $x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{5 \pm \sqrt{17}}{4}$ $\frac{5 + \sqrt{17}}{4}$ $\frac{5 - \sqrt{17}}{4}$ د) $2x^2 + 5x + 9 = 0$ $\Delta = 25 - 4 \times 2 \times 9 = -47$ $\Delta = -47 < 0$ فاذا لم يكن له حلا حقيقيا	1
$S = \frac{b}{a} = \frac{5}{2}, P = \frac{c}{a} = \frac{3}{2}$ $x^2 - 3m - 2 = 0$ الف) $S^2 - 2P = (\frac{5}{2})^2 - 2 \times \frac{3}{2} = \frac{25}{4} - 3 = \frac{13}{4}$ ب) $S^2 - 2SP = (\frac{5}{2})^2 - 2 \times \frac{5}{2} \times \frac{3}{2} = \frac{25}{4} - \frac{15}{2} = \frac{5}{4}$		9
الف) $\binom{5}{2} + \binom{9}{2} = \frac{5 \times 4 \times 3}{2 \times 1} + \frac{9 \times 8 \times 7}{2 \times 1} = 10 + 36 = 46$ ب) $\binom{9}{2} - \binom{1}{2} = \frac{9 \times 8 \times 7}{2 \times 1} - \frac{1 \times 0 \times -1}{2 \times 1} = 36 - 0 = 36$		10