

I

$$x^2 - 4x + 3 = 0$$

$$\Delta$$
$$-3 -1$$

$$x_1 = 3, \quad x_2 = 1$$

2

$$-2x^2 + 4x + 3 = 0$$

$$\Delta$$
$$3 \quad 1$$

$$x_1, x_2 = \frac{4 \pm \sqrt{(-4)^2 - 4 \cdot (-2) \cdot 3}}{4}$$

$$\frac{4 \pm \sqrt{16 + 24}}{4}$$

$$x_1 = \frac{4 + \sqrt{40}}{4} = \frac{2 + \sqrt{10}}{2}$$

$$x_2 = \frac{4 - \sqrt{40}}{4} = \frac{2 - \sqrt{10}}{2}$$

3

$$2x^2 - x - 5 = 0$$

$$\frac{1 \pm \sqrt{(-1)^2 - 4 \cdot 2 \cdot (-5)}}{4}$$

$$x_1 = \frac{1 + \sqrt{41}}{4}, \quad x_2 = \frac{1 - \sqrt{41}}{4}$$

$$4 \quad x^2 - 6x - 5 = 0$$

$$\frac{6 \pm \sqrt{(-6)^2 - 4 \cdot 1 \cdot (-5)}}{2}$$

$$x_1 = \frac{6 + \sqrt{56}}{2} = 3 + \sqrt{14}$$

$$x_2 = \frac{6 - \sqrt{56}}{2} = 3 - \sqrt{14}$$

$$5 \quad 3x^2 - 5x + 9 = 0 \quad \rightarrow 25 - 108$$

$x \notin \mathbb{R}$
//

II

$$y = x^2 - 2x - 8$$

^
-4 2

$$x_1 = 4$$

$$x_2 = -2$$

$$A = 2$$

$$B = -8$$

$$C = 4^2 + (-2)^2 = (4 + (-2))^2 - 2(4)(-2)$$

$$16 + 4 = 4 + 16$$

$$20 = 20 \rightarrow \text{Benar}$$

$$D = \frac{1}{4} + \frac{1}{-2} = \frac{4 + (-2)}{4 \cdot -2}$$

$$-\frac{1}{4} = -\frac{1}{4} \quad \checkmark \text{ Benar}$$

$$E = (4+2)^2 = (4-2)^2 - 4 \cdot 4 \cdot (-2)$$

$$64 = 4 + 32$$

$$64 = 36 \rightarrow \text{Salah}$$

$$F = 4^3 + (-2)^3 = 4 + (-2)^3 - 3 \cdot 4 \cdot (-2) (4 + (-2))$$

$$64 = 4 + 48$$

$$64 = 52 \rightarrow \text{Salah}$$

$$2 \quad A \quad (x+2)(x-6) = 0$$

$$x^2 - 6x + 2x - 12 = 0$$

$$x^2 - 4x - 12 = 0$$

"

$$B \quad (x+4)(x+3)$$

$$x^2 + 3x + 4x + 12 = 0$$

$$x^2 + 7x + 12 = 0$$