

$$1) \quad x^2 - 3x + 1 = 0 \quad \Sigma \text{ negative} = 3 \quad \text{positive} = 1$$

$$2) \quad 3x^2 + x + 4 = 0 \quad \Delta = \sqrt{1 - 3 \cdot 4 \cdot 4} < 0 \quad \text{negative} \text{ nur}$$

$$3) \quad \frac{1}{3}x^2 + \frac{1}{2}x - 3 = 0 \quad | \times 6 \quad 2x^2 + 3x - 18 = 0 \quad \Delta = \sqrt{3^2 + 4 \cdot 2 \cdot 18} > 0$$

$$\Sigma \text{ negative} = -\frac{1}{2} \quad \text{positive} = -3$$

$$4) \quad 1.4x^2 - 3x + \frac{7}{5} = 0 \quad | \times 7 = 9.8x^2 - 21x + 5 = 0 \quad \Delta = \sqrt{21^2 - 4 \cdot 9.8 \cdot 5} > 0$$

$$\Sigma \text{ negative} = 3 \quad \text{positive} = \frac{7}{5}$$

$$5) \quad 0.1x^2 - 8x + 4.2 = 0 \quad | \times 10 \quad x^2 - 80x + 42 = 0 \quad \Delta = \sqrt{40^2 - 42} > 0$$

$$\Sigma \text{ negative} = 8 \quad \text{positive} = 4.2$$

$$6) \quad 3x^2 + 1.1x - 0.4 = 0 \quad | \times 10 \quad 30x^2 + 11x - 4 = 0 \quad \Delta = \sqrt{11^2 + 4 \cdot 30 \cdot 4} > 0$$

$$\Sigma \text{ negative} = -1.1 \quad \text{positive} = -0.4$$