

Биквадратные уравнения

$$1) 25x^4 + 66x^2 - 27 = 0$$

$$x^2 = t$$

$$25t^2 + 66t - 27 = 0$$

$$D^* = 33^2 - 25 \cdot (-27) = 33^2 + 25 \cdot 27 = 42^2$$

$$t_1 = \frac{-33 + 42}{25} = \frac{9}{25}$$

$$t_2 = \frac{-33 - 42}{25} = \frac{-75}{25} = -3$$

$$x^2 = \frac{9}{25}$$

$$x^2 - \frac{9}{25} = 0$$

$$(x - \frac{3}{5})(x + \frac{3}{5}) = 0$$

$$0 \quad \text{or} \quad 0$$

$$x = \frac{3}{5} \quad x = -\frac{3}{5}$$

$$x^2 = -3$$

no answer

answer : $\frac{3}{5}$; $-\frac{3}{5}$

$$2) x^6 + 9x^3 + 8 = 0$$

$$x^3 = t$$

$$t^2 + 9t + 8 = 0$$

$$D = 81 - 32 = 49$$

$$t_1 = \frac{-9-7}{2} = -8$$

$$t_2 = \frac{-9+7}{2} = -1$$

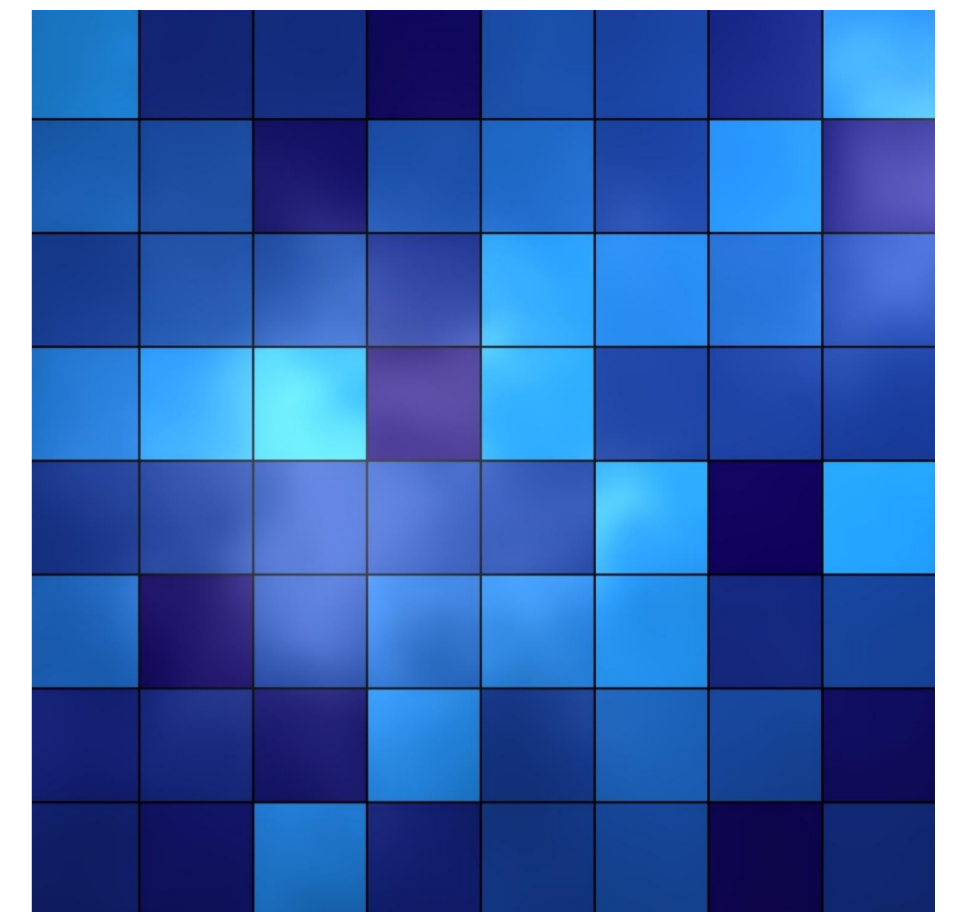
$$x^3 = -8$$

$$x = -2$$

$$x^3 = -1$$

$$x = -1$$

answer : -1 ; -2



$$\sqrt{17.64} = 4.2$$

$$-1.6$$

$$82 \mid 164$$

$$2 \mid 164$$

$$0$$