

Löse die folgenden kubischen Gleichungen $ax^3 + bx^2 + cx = 0$

$$0.5x^3 - x^2 - 17.5x = 0$$
$$x_1 = 0, \quad x_2 = -5, \quad x_3 = 7$$

$$3x^3 - 15x^2 + 18x = 0$$
$$x_1 = 0, \quad x_2 = 2, \quad x_3 = 3$$

$$4.5x^3 + 9x^2 + 4.5x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = -1$$

$$7x^3 - 140x^2 + 700x = 0$$
$$x_1 = 0, \quad x_2 = 10, \quad x_3 = 10$$

$$6.5x^3 + 45.5x^2 - 52x = 0$$
$$x_1 = 0, \quad x_2 = -8, \quad x_3 = 1$$

$$5x^3 + 30x^2 - 80x = 0$$
$$x_1 = 0, \quad x_2 = -8, \quad x_3 = 2$$

$$9x^3 - 54x^2 = 0$$
$$x_1 = 0, \quad x_2 = 0, \quad x_3 = 6$$

$$10x^3 - 40x^2 = 0$$
$$x_1 = 0, \quad x_2 = 0, \quad x_3 = 4$$

$$-4.5x^3 + 40.5x^2 - 36x = 0$$
$$x_1 = 0, \quad x_2 = 1, \quad x_3 = 8$$

$$4.5x^3 - 18x^2 - 22.5x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = 5$$

$$2.5x^3 - 37.5x^2 + 135x = 0$$
$$x_1 = 0, \quad x_2 = 6, \quad x_3 = 9$$

$$-3.5x^3 + 42x^2 - 112x = 0$$
$$x_1 = 0, \quad x_2 = 4, \quad x_3 = 8$$

$$9.5x^3 - 57x^2 = 0$$
$$x_1 = 0, \quad x_2 = 0, \quad x_3 = 6$$

$$-x^3 + 6x^2 + 7x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = 7$$

$$0.5x^3 - 3.5x^2 - 4x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = 8$$

$$-8.5x^3 + 59.5x^2 + 68x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = 8$$

$$8x^3 - 48x^2 - 56x = 0$$
$$x_1 = 0, \quad x_2 = -1, \quad x_3 = 7$$

$$8x^3 - 152x^2 + 720x = 0$$
$$x_1 = 0, \quad x_2 = 9, \quad x_3 = 10$$

$$3.5x^3 - 10.5x^2 - 63x = 0$$
$$x_1 = 0, \quad x_2 = -3, \quad x_3 = 6$$

$$3x^3 - 24x^2 - 60x = 0$$
$$x_1 = 0, \quad x_2 = -2, \quad x_3 = 10$$