

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

$$3.5x^3 + 17.5x^2 - 49x = 0$$
$$x_1 = 0, \quad x_2 = -7, \quad x_3 = 2$$

$$10x^3 + 50x^2 - 140x = 0$$
$$x_1 = 0, \quad x_2 = -7, \quad x_3 = 2$$

$$-4.5x^3 + 49.5x^2 - 81x = 0$$
$$x_1 = 0, \quad x_2 = 2, \quad x_3 = 9$$

$$-8.5x^3 - 42.5x^2 + 119x = 0$$
$$x_1 = 0, \quad x_2 = -7, \quad x_3 = 2$$

$$8.5x^3 - 8.5x^2 - 102x = 0$$
$$x_1 = 0, \quad x_2 = -3, \quad x_3 = 4$$

$$6x^3 - 30x^2 + 36x = 0$$
$$x_1 = 0, \quad x_2 = 2, \quad x_3 = 3$$

$$-8x^3 - 128x^2 - 504x = 0$$
$$x_1 = 0, \quad x_2 = -9, \quad x_3 = -7$$

$$6x^3 - 90x^2 + 300x = 0$$
$$x_1 = 0, \quad x_2 = 5, \quad x_3 = 10$$

$$6x^3 - 6x^2 - 540x = 0$$
$$x_1 = 0, \quad x_2 = -9, \quad x_3 = 10$$

$$9.5x^3 - 47.5x^2 - 342x = 0$$
$$x_1 = 0, \quad x_2 = -4, \quad x_3 = 9$$

$$1.5x^3 + 16.5x^2 + 27x = 0$$
$$x_1 = 0, \quad x_2 = -9, \quad x_3 = -2$$

$$3.5x^3 - 7x^2 = 0$$
$$x_1 = 0, \quad x_2 = 0, \quad x_3 = 2$$

$$9.5x^3 + 47.5x^2 - 133x = 0$$
$$x_1 = 0, \quad x_2 = -7, \quad x_3 = 2$$

$$9x^3 = 0$$
$$x_1 = 0, \quad x_2 = 0, \quad x_3 = 0$$

$$6x^3 - 60x^2 + 96x = 0$$
$$x_1 = 0, \quad x_2 = 2, \quad x_3 = 8$$

$$10x^3 + 150x^2 + 500x = 0$$
$$x_1 = 0, \quad x_2 = -10, \quad x_3 = -5$$

$$4x^3 + 8x^2 - 320x = 0$$
$$x_1 = 0, \quad x_2 = -10, \quad x_3 = 8$$

$$-8x^3 + 144x^2 - 648x = 0$$
$$x_1 = 0, \quad x_2 = 9, \quad x_3 = 9$$

$$5.5x^3 - 27.5x^2 + 22x = 0$$
$$x_1 = 0, \quad x_2 = 1, \quad x_3 = 4$$

$$6x^3 + 18x^2 = 0$$
$$x_1 = 0, \quad x_2 = -3, \quad x_3 = 0$$