

$$0 = -7x^2 + 14x + 21$$

$$a = -7 \quad b = +14 \quad c = +21$$

$$x = \frac{-(-14) \pm \sqrt{(-14)^2 - 4(-7)(21)}}{2(-7)}$$

$$x = \frac{-14 \pm \sqrt{196 + 588}}{-14}$$

$$x = \frac{-14 \pm \sqrt{784}}{-14}$$

$$x = \frac{-14 \pm 28}{-14}$$

$$x = \frac{-14 + 28}{-14} \quad \text{or} \quad \frac{-14 - 28}{-14}$$

$$x = 10 \pm 2$$

-1, 3

$$0 = 2x^2 - 14x + 24$$

$$a = 2 \quad b = -14 \quad c = 24$$

$$x = \frac{-(-14) \pm \sqrt{(-14)^2 - 4(2)(24)}}{2(2)}$$

$$x = \frac{14 \pm \sqrt{196 - 192}}{4}$$

$$x = \frac{14 \pm \sqrt{4}}{4}$$

Scribe

$$x = \frac{14 \pm 7}{4}$$

$$x = \frac{14}{4} \pm \frac{7}{4}$$

$$x = 3,5 \pm 1,75 \rightarrow 4$$

$$\searrow 3$$

4, 3

$$0 = -7x^2 + 63$$

$$0 = -7 \quad b = 0 \quad c = 63$$

$$x = \frac{-0 \pm \sqrt{0^2 - 4(-7)(63)}}{2(-7)}$$

$$x = \frac{-0 \pm \sqrt{0 + 1,564}}{-14}$$

$$x = \frac{-0 \pm \sqrt{1,564}}{-14}$$

$$x = \frac{-0 \pm 1,25}{-14}$$

$$x = \frac{-0 \pm 1,25}{-14}$$

$$x = 0 \pm -0,09 \rightarrow -3$$

$$x = 0 \pm -0,09 \searrow 3$$

-3, 3

$$0 = x^2 - 7x - 4$$

$$a = 1 \quad b = -7 \quad c = -4$$

$$x = \frac{-(-7) \pm \sqrt{(-7)^2 - 4(1)(-4)}}{2(1)}$$

$$x = \frac{7 \pm \sqrt{49 + 16}}{2}$$

$$x = \frac{7 \pm \sqrt{65}}{2}$$

$$x = \frac{7 \pm 8,0}{2}$$

$$x = 7,5 \pm 4$$

$$7,5 \vee 0,5$$

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

$$a = 1 \quad b = -2 \quad c = -2$$

$$x = \frac{-(-2) \pm \sqrt{(-2)^2 - 4(1)(-2)}}{2(1)}$$

$$x = \frac{2 \pm \sqrt{4 + 8}}{2}$$

$$x = \frac{2 \pm \sqrt{12}}{2}$$

Scribe

$$x = \frac{2 \pm 3,4}{2}$$

$$x = \frac{2}{2} \pm \frac{3,4}{2} \rightarrow 2,7$$

$$x = 1 \pm 1,7 \rightarrow -0,7$$

$$\frac{\sqrt{12}}{2} = \sqrt{\frac{12}{4}}$$

$$1 = \sqrt{3}$$

$$0 = ax^2 - 24 = 0$$

$$0 = 4 - b = 0 \quad c = -24$$

$$x = \frac{-(0) \pm \sqrt{(0)^2 - 4(4)(-24)}}{2(4)}$$

$$x = \frac{-0 \pm \sqrt{0 + 384}}{8}$$

$$x = \frac{-0 \pm \sqrt{384}}{8}$$

$$x = \frac{-0 \pm 19,59}{8}$$

$$x = \frac{-0 \pm \sqrt{19,5a}}{8}$$

$$x = 0 \pm 2,4a \rightarrow 2,4a$$
$$x = 0 \pm 2,4a \rightarrow -2,4a$$

$$\sqrt{\frac{384a}{8}} = \sqrt{\frac{384a}{64}}$$

$$= \pm \sqrt{6a}$$

$$2x^2 - 6x - 2 = 4x - 3$$

$$2x^2 - 6x - 4x - 2 + 3 = 0$$

$$2x^2 - 10x + 1 = 0$$

$$0 = 2x^2 - 10x + 1$$

$$a = 2 \quad b = -10 \quad c = 1$$

$$x = \frac{-(-10) \pm \sqrt{(-10)^2 - 4(2)(1)}}{2(2)}$$

$$x = \frac{10 \pm \sqrt{100 - 8}}{4}$$

Scribe

$$x = \frac{10 \pm \sqrt{92}}{4}$$

$$x = \frac{10}{4} \pm \frac{\sqrt{92}}{4}$$

~~$x = \frac{10}{4} \pm \frac{\sqrt{92}}{4}$~~

$$x = \frac{5 \pm \sqrt{23}}{2}$$

$$14x^2 + 4x + 14 = -6x^2$$

$$14x^2 + 6x^2 + 4x + 14 = 0$$

$$20x^2 + 4x + 14 = 0$$

$$0 = 20x^2 + 4x + 14$$

$$a = 20 \quad b = 4 \quad c = 14$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$x = \frac{-4 \pm \sqrt{16 - 1120}}{40}$$

$$x = \frac{-4 \pm \sqrt{-1104}}{40}$$

Handwritten mathematical work on grid paper. At the top, there are two quadratic equations: $\frac{-9 \pm \sqrt{-1,104}}{40}$ and $\frac{-9 \pm \sqrt{-1,104}}{4}$. Below these, the expression $\frac{1 \pm \sqrt{29}}{4}$ is circled in red.

