

2229

$$(a) \quad ax^2 + bx + c = 0$$

$$x^2 + \frac{b}{a}x + \frac{c}{a} = 0$$

$$x = -\frac{b}{2a} \pm \sqrt{\left(\frac{b}{2a}\right)^2 - \frac{c}{a}}$$

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

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

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

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

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

$$(b) \quad 8x^2 - 56 - 480 = 0$$

"abc-formeln" ger

$$x = \frac{+56 \pm \sqrt{56^2 - 4 \cdot 8 \cdot (-480)}}{2 \cdot 8}$$

$$x = \frac{56 \pm 136}{16}$$

$$x_1 = \frac{192}{16}$$

$$x_2 = -\frac{80}{16}$$

$$x_1 = 12$$

$$x_2 = -5$$

Svar: $x_1 = 12$, $x_2 = -5$