

S 76 Nr. 2

$$a) 5x^3 - 20 = 7 - 3x^3 \quad | +3x^3 + 20$$

$$8x^3 = 27 \quad | : 8$$

$$x^3 = \frac{27}{8} \quad | \sqrt[3]{\quad}$$

$$x = \sqrt[3]{\frac{27}{8}} = \frac{3}{2}$$

$$b) 65 - 53x^2 = 16 + 47x^2 \quad | +53x^2 - 16$$

$$65 - 16 = 47x^2 + 53x^2$$

$$49 = 100 \cdot x^2 \quad | \cdot 100$$

$$\frac{49}{100} = x^2 \Rightarrow x_{1,2} = \pm \sqrt{\frac{49}{100}} = \pm \frac{7}{10}$$

$$c) 1,2 \cdot x^5 + 0,00243 = 0,2 \cdot x^5 \quad | -0,2 \cdot x^5 - 0,00243$$

$$1,2 \cdot x^5 - 0,2 \cdot x^5 = -0,00243$$

$$1 \cdot x^5 = -0,00243 = -\frac{243}{100000} \quad | \sqrt[5]{\quad}$$

$$x = -\sqrt[5]{\frac{243}{100000}} = -\frac{3}{10}$$
