

str. 135 / úloha 727

$$A = ? [^{\circ}\text{C}]$$

$$m = 0,4 \text{ kg}$$

$$A_0 = 20^{\circ}\text{C}$$

$$Q_p = 30 \text{ kJ} = 30\,000 \text{ J}$$

$$c = 4180 \frac{\text{J}}{\text{kg} \cdot ^{\circ}\text{C}}$$

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$$Q_p = m \cdot c \cdot (A - A_0)$$

$$\frac{Q_p}{m \cdot c} = A - A_0$$

$$A = \frac{Q_p}{m \cdot c} + A_0$$

$$A = \frac{30\,000}{0,4 \cdot 4180} + 20$$

$$A = 37,9^{\circ}\text{C}$$

$$\underline{\underline{A \doteq 38^{\circ}\text{C}}}$$

Voda se ohreje na teplotu  $38^{\circ}\text{C}$ .