

② Äquivalenzumformungen

Welche Äquivalenzumformungen wurden gemacht? Ergänze die Umformungsschritte.

$$\text{a) } 21z - 13 = 18z - 4 \quad |$$

$$\text{b) } 3,6a - 2,4 = 3,5a - 2,3 \quad |$$

$$21z = 18z + 9 \quad |$$

$$3,6a = 3,5a + 0,1 \quad |$$

$$3z = 9$$

$$0,1a = 0,1 \quad |$$

$$z = 3$$

$$a = 1$$

③ Gleichungen umformen

Löse die Gleichung mithilfe von Äquivalenzumformungen. Bestimme dazu die Lösungsmenge im Bereich der natürlichen Zahlen $\mathbb{N}$. Mache die Probe.

$$4 \cdot (x - 2) = 2 + 2 \cdot (x - 7)$$

A full-page sheet of white graph paper with a light gray grid. The grid consists of small squares, approximately 1 cm by 1 cm each. There are 20 columns and 20 rows of squares. A horizontal margin line is present near the top edge, about one-fifth of the way down from the top. Another horizontal margin line is present near the bottom edge, about one-fifth of the way up from the bottom. These two lines divide the page into three horizontal sections: a narrow top section, a large central section, and a narrow bottom section. The grid covers the entire area of the page, including the margins.