

Lösung 6.5

01 a) $x^2 \left(\frac{x}{2} \right) = (4)^{x^2}$ $x = 8$	$\frac{8}{2} = 4$ $4 = 4 \checkmark$	b) $x^3 \left(\frac{x}{3} \right) = (7)^{x^3}$ $x = 21$	$\frac{21}{3} = 7$ $7 = 7 \checkmark$
c) $x^4 \left(\frac{x}{4} \right) = (16)^{x^4}$ $x = 64$	$\frac{64}{4} = 16$ $16 = 16 \checkmark$	d) $x^5 \left(\frac{x}{5} \right) = (10)^{x^5}$ $x = 50$	$\frac{50}{5} = 10$ $10 = 10 \checkmark$

a) $x + 5 = 12$ $-5 \quad -5$ $x = 7$	b) $x - 5 = 12$ $+5 \quad +5$ $x = 17$	c) $x^6 \left(\frac{x}{6} \right) = (9)^{x^6}$ $x = 54$
d) $x + 4 = -9$ $-4 \quad -4$ $x = -13$	e) $\frac{4x}{4} = \frac{36}{4}$ $x = 9$	f) $\frac{16x}{16} = \frac{112}{16}$ $x = 7$
g) $4x + 2 = 30$ $-2 \quad -2$ $\frac{4x}{4} = \frac{28}{4}$ $x = 7$	h) $8x + 17 = 105$ $-17 \quad -17$ $\frac{8x}{8} = \frac{88}{8}$ $x = 11$	