Løsning af ligninger

$x^a = b$ $\Downarrow$ $x = \sqrt[a]{b}$	$x^7 = 2300$ $\Downarrow$ $x = \sqrt[7]{2300}$ $\Downarrow$ $x = 3{,}021667$	$330 = 150 \cdot (1+r)^7$ $\Downarrow$ $\frac{330}{150} = (1+r)^7$ $\Downarrow$ $\sqrt[7]{\frac{330}{150}} = 1 + r$ $\Downarrow$ $r = \sqrt[7]{\frac{330}{150}} - 1 = 0{,}1192 = 11{,}92\%$
$a^x = b$ $\Downarrow$ $x = \frac{\ln(b)}{\ln(a)}$ eller $x = \frac{\log(b)}{\log(a)}$	$1{,}4^x = 6$ $\Downarrow$ $x = \frac{\ln(6)}{\ln(1{,}4)}$ $\Downarrow$ $x = 5{,}3251$	$3500 = 3000 \cdot (1 + 0{,}02)^n$ $\Downarrow$ $\frac{3500}{3000} = 1{,}02^n$ $\Downarrow$ $n = \frac{\ln\left(\frac{3500}{3000}\right)}{\ln(1{,}02)} = 7{,}78$

Løs følgende ligninger uden at solve (tjek, at du har regnet rigtigt ved at solve i maple)

1) $2^x = 10$
2) $x^5 = 1000$
3) $2 \cdot x^3 = 16$
4) $4 \cdot x^{3{,}6} = 16$
5) $5 \cdot 3^x = 10$
6) $4000 = 3000 \cdot (1+r)^8$
7) $6000 = 3500 \cdot (1 + 0{,}03)^n$
8) $650 = K_o(1 + 0{,}10)^6$