

## Machten oefening 1 antwoorden

1 Schrijf als macht of als product van machten:

a  $x^{2\frac{1}{2}}$

b  $3x^{\frac{1}{2}}$

c  $3x^{2\frac{1}{2}}$

d  $x^{2\frac{1}{2}}$

e  $x^{-\frac{1}{2}}$

f  $1\frac{1}{2}x^{-3}$

2 Schrijf zonder negatieven en/of gebroken exponenten:

a  $\frac{1}{x^4}$

b  $x^3\sqrt{x}$

c  $\sqrt[3]{x^2}$

d  $\frac{1}{x^2\sqrt{x}}$

**1 a**  $x^6 - 3x^5 = 0$   
 $x^5(x-3) = 0$   
 $x=0$  of  $x=3$

**b**  $x^{\frac{1}{3}} = 2$   
 $x=8$

**c**  $x^6 = 10x^2$   
 $x^2(x^4 - 10) = 0$   
 $x=0$  of  $x = 1,7783$

**1 a**  $x^4 + 27x = 0$   
 $x(x^3 + 27) = 0$   
 $x = 0 \vee x = -2$

**b**  $x^7 = x^3$   
 $x^7 - x^3 = 0$   
 $x^3(x^4 - 1) = 0$   
 $x=0$  of  $x=1$  of  $x=-1$

**c**  $x^{1,34} = 25$   
 $(x^{1,34})^{\frac{1}{1,34}} = (25)^{\frac{1}{1,34}}$   
 $x = 11,047$