

Letterrekenen

Delen uitwerkingen

Voorbeeld:

$$\frac{(xy)^5}{x^2 y^3} = \frac{x^5 y^5}{x^2 y^3} = x^{5-2} y^{5-3} = x^3 y^2$$

Opgave 6.1

Herleid.

a) $\frac{x^9}{x^4} = x^5$

d) $\frac{6y^{12}}{3y^5} = 2y^7$

b) $\frac{12p^6 q}{4p^5 q} = 3p$

e) $\frac{24x^7}{12x} = 2x^6$

c) $\frac{6a^6}{2a^2} = 3a^4$

f) $\frac{56y^4}{8y^2} = 7y^2$

Opgave 6.2

Herleid.

a) $\frac{14p^3 q^5}{7pq^4} = 2p^2 q$

d) $\frac{45(b^4)^3}{9b^6} = \frac{45b^{12}}{9b^6} = 5b^6$

b) $\frac{(a^3)^4}{a^5} = \frac{a^{12}}{a^5} = a^7$

e) $\frac{32(p^2 q^2)^3}{8p^2 q^2} = \frac{32p^6 q^6}{8p^2 q^2} = 4p^4 q^4$

c) $\frac{28(x^2)^3}{7x^5} = \frac{28x^6}{7x^5} = 4x$

f) $\frac{63(ab)^3}{9(ab)^2} = \frac{63a^3 b^3}{9a^2 b^2} = 7ab$

Opgave 6.3

Herleid.

a) $\frac{3xy^3}{3y^2} = xy$

e) $\frac{32a^2 y^5}{16(ay)^2} = \frac{32a^2 y^5}{16a^2 y^2} = 2y^3$

b) $\frac{27(x^3 y)^2}{9x^2 y^2} = \frac{27x^6 y^2}{9x^2 y^2} = 3x^4$

f) $\frac{24(bc)^5}{8(bc)^5} = \frac{24b^5 c^5}{8b^5 c^5} = 3$

c) $\frac{49(a^{11} b)^2}{7a^6 b} = \frac{49a^{22} b^2}{7a^6 b} = 7a^{16} b$

g) $\frac{42(abc)^4}{6(ac)^3} = \frac{42a^4 b^4 c^4}{6a^3 c^3} = 7ab^4 c$