3. Multiplikation

Übungen

1) Vereinfache

a) $\frac{15x^2yz}{14xy}\cdot\frac{28z^5}{24x^3y^2}=$

b) $\frac{-7x^2}{y}\cdot\frac{-5y^3}{x^8}=$

c) $\frac{3x^2y}{4z^3}\cdot\frac{8y^4z}{5x^3}\cdot\left(-\frac{10x}{y^6z^2}\right)=$

d) $\frac{x^2-x}{x+1}\cdot\frac{x^2+5x+4}{x^3}=$

e) $(m-3)\cdot\frac{m+4}{m^2-7m+12}=$

f) $\frac{2c+2}{3c^2-12}\cdot\frac{c^3+2c^2}{c^2+c}=$

2) Berechne

a) $\frac{xy}{x+y}\cdot\left(\frac{1}{x^2}-\frac{1}{y^2}\right)=$

b) $\left(\frac{x-2}{x^2-1}-2\right)\cdot\left(x+\frac{x+4}{1-2x}\right)=$

c) $\left(\frac{f}{2}+\frac{1}{f}\right)^2=$

d) $\left(\frac{x+1}{x}\right)^2-\left(\frac{1}{x}-1\right)^2=$

e) $\left(t-\frac{s}{t}\right)^2-\left(t+\frac{s}{t}\right)^2=$

f) $\left(\frac{12}{c+d}-\frac{8}{c-d}\right)\cdot\frac{d^2-c^2}{4c}=$