

1. calcula:

(a) $\frac{3^{-2} \cdot 3^5 \cdot 2^3}{(3 \cdot 2)^4}$

Sol: 1/6

Sol: 125/16

Sol: 729/64

(b) $3^{-5} \cdot \left(\frac{1}{3}\right)^{-2} \cdot 81$

Sol: 3

(d) $\frac{2^{-2} \cdot (2^2)^3}{2^{-3}}$

Sol: 128

(g) $\frac{\sqrt{2} \cdot (\sqrt{2})^3 \cdot (\sqrt{5})^3}{(5\sqrt{2})^2}$

Sol: $2 * \text{sqrt}(5)/5$

(c) $\left(\frac{5}{4}\right)^5 \cdot \frac{2^6}{5^2}$

Sol: 1/390650

(h) $\frac{9^{\frac{1}{2}} \cdot 3^{-1} \cdot 2^{\frac{3}{2}}}{\sqrt{2}}$

Sol: 2

(f) $\left(\frac{2}{3}\right)^{-2} \cdot \left(\frac{3}{2}\right)^4$