

1. Simplify.

a) $(4x^5y^6)(20x^7y^4) =$

b) $\frac{36x^{12}y^4}{4xy^2} =$

c) $17y^0 =$

d) $x^3y^{-4} =$

e) $\frac{x^{-3}}{y^{-7}} =$

f) $(3x^2y)^4 =$

g) $\left(-\frac{2x}{y}\right)^5 =$

$$\text{h) } \frac{15x^2}{3x^{11}} =$$

$$\text{i) } \frac{24x^2y^{13}}{-2x^5y^{-2}} =$$

$$\text{j) } \left(\frac{4a^{-5}b^3}{12a^3b^{-5}} \right)^0 =$$

$$\text{k) } \left(\frac{x^6y^{-7}}{2} \right)^{-3} =$$