

$$\text{c) } \left(\frac{x^3y^4}{-x^2}\right)^5 \cdot \left(\frac{-2x^2y^3}{-xy^2}\right)^3 = -\frac{x^{15}y^{20}}{x^{10}} \cdot \frac{8x^6y^9}{x^3y^6} = -\frac{8x^{21}y^{29}}{x^{13}y^6} = -8x^8y^{23}$$

$$\text{d) } \left(-\frac{9t^6}{10u^4}\right)^2 : \left(-\frac{3t^2}{5u^5}\right)^2 = \frac{81t^{12}}{100u^8} : \frac{9t^4}{25u^{10}} = \frac{81t^{12}}{100u^8} \cdot \frac{25u^{10}}{9t^4} = \frac{9t^8u^2}{4}$$

