

$$\frac{14}{15} \div \frac{7}{5} = \frac{14}{15} \cdot \frac{5}{7} = \frac{2}{3}$$

$$\frac{14 \div 7}{15 \div 5} = \frac{2}{3}$$

Dividing by a fraction is the same thing as multiplying by its reciprocal.

$$\frac{5c^4}{9a^2} \div \frac{2a}{3c^7}$$

$$\frac{5c^4}{9a^2} \cdot \frac{3c^7}{2a} = \frac{15c^{11}}{18a^3} = \frac{5c^{11}}{6a^3}$$

$$\frac{6p^2q}{r} \div \frac{3p^2q^2}{r} \cdot \frac{2q^2}{pr}$$

$$\frac{6p^2q}{r} \cdot \frac{r}{3p^2q^2} \cdot \frac{2q^2}{pr}$$

$$\frac{12p^2q^3}{3r^2pq^2} = \frac{4q}{pr}$$

$$\frac{x^2 y}{3} \cdot \frac{4x}{y^2} \cdot \left(\frac{2x^2}{3}\right)^{-1}$$

$$\frac{2^{-1} x^{-2}}{3^{-1}} = \frac{3}{2x^2}$$

$$\frac{\cancel{x^2} y}{\cancel{3}} \cdot \frac{4x}{y^2} \cdot \frac{\cancel{3}}{\cancel{2x^2}} = \frac{2x}{y}$$

$$\frac{12x^3 y}{6x^2 y^2} = \frac{2x}{y}$$

ADVANCED

$$\frac{(3x^2 - 6x)}{x^2 - 6x + 9} \cdot \frac{(x^2 - x - 6)}{x^2 - 4}$$

$$\frac{3x(\cancel{x-2})}{(x-3)(\cancel{x-3})} \cdot \frac{(\cancel{x+2})(\cancel{x-3})}{(\cancel{x-2})(\cancel{x+2})}$$

$$\frac{3x}{x-3}$$

$$\frac{x^2-1}{x+2} \div \frac{x-1}{x+2} \cdot \frac{x^2-4}{x-1}$$

$$\frac{(x+1)\cancel{(x-1)}\cancel{(x+2)}(x+2)(x-2)}{\cancel{(x+2)}\cancel{(x-1)}(x-1)}$$

$$\frac{(x+1)(x+2)(x-2)}{(x-1)}$$

$$9. \quad \frac{4rs^2}{45} \div \frac{3s}{27r} \div \frac{9rs}{10}$$