

$$1) \frac{28x^3}{5} \div \frac{7x^2}{20}$$

$$\frac{4 \cancel{28} x^3}{1 \cancel{5}} \cdot \frac{4 \cancel{20}}{1 \cancel{7} x^2} = \frac{16x}{1} = 16x$$

$$5) \frac{36y}{1} \div \frac{9y}{20}$$

$$\frac{4 \cancel{36} y}{1} \cdot \frac{20}{1 \cancel{9} y} = \frac{80}{1} = 80$$

$$9) -\frac{14x}{99y^2} \div \frac{28x^3}{11y^3}$$

$$-\frac{1 \cancel{14} x}{9 \cancel{99} y^2} \cdot \frac{1 \cancel{11} y^3}{2 \cancel{28} x^3} = -\frac{y}{18x^2}$$

$$2) \frac{3k}{4t} \div -\frac{3k^5}{8t}$$

$$\frac{1 \cancel{3} k}{1 \cancel{4} t} \cdot \frac{2 \cancel{8} t}{1 \cancel{3} k^5} = -\frac{2}{k^4}$$

$$6) \frac{14z}{x^2y} \div \frac{42z^3}{x^3y}$$

$$\frac{1 \cancel{14} z}{x^2 y} \cdot \frac{x^3 y}{4 \cancel{42} z^3} = \frac{x}{3z^2}$$

$$10) \frac{4a^3}{b} \div \frac{36a^3}{ab}$$

$$\frac{1 \cancel{4} a^3}{b} \cdot \frac{b}{9 \cancel{36} a^3} = \frac{1}{9}$$

$$3) -\frac{18a^2}{25} \div -\frac{45a^3}{1}$$

$$-\frac{2 \cancel{18} a^2}{25} \cdot \frac{1}{5 \cancel{45} a^3} = \frac{2}{125a}$$

$$7) -\frac{16r}{15u^2} \div \frac{2}{5u}$$

$$-\frac{8 \cancel{16} r}{3 \cancel{15} u^2} \cdot \frac{1 \cancel{5} u}{2} = -\frac{8r}{3u}$$

$$11) -\frac{ab^3}{c^2} \div -\frac{a^2b}{c}$$

$$-\frac{\cancel{a} b^3}{c^2} \cdot -\frac{c}{\cancel{a}^2 b} = \frac{b^2}{ca}$$

General note:

You may choose to reduce in an order that differs from the key, but your final answer should always match.

$$4) \frac{15y^4}{2y} \div \frac{24y^3}{y^5}$$

$$\frac{5 \cancel{15} y^3}{2} \cdot \frac{y^2}{\cancel{24}} = \frac{5y^5}{16}$$

$$8) -\frac{a^2b^3}{b^2} \div -\frac{b^3}{b}$$

$$-\frac{\cancel{a}^2 b}{1} \cdot -\frac{1}{\cancel{b}^3} = \frac{a^2}{b}$$

$$12) \frac{12x^4y^2}{x^3} \div \frac{3xy}{10y}$$

$$\frac{4 \cancel{12} x y^2}{1} \cdot \frac{10}{3 \cancel{x}} = \frac{40y^2}{1}$$