

Fill in the Blanks

Dividing Algebraic Fractions

Question	Write as a Multiplication	Simplify Numerator and Denominator	Simplified Answer (where possible)
$\frac{x}{4} \div \frac{x}{2y}$	$\frac{x}{4} \times \frac{2y}{x}$	$\frac{2xy}{4x}$	$\frac{y}{2}$
$\frac{3x}{y} \div \frac{1}{xy}$	$\frac{3x}{y} \times \frac{xy}{1}$	$\frac{3x^2y}{y}$	$3x^2$
$\frac{2y}{3} \div \frac{4}{y}$	$\frac{2y}{3} \times \frac{y}{4}$	$\frac{2y^2}{12}$	$\frac{y^2}{6}$
$\frac{xy}{5} \div \frac{3y}{10}$	$\frac{xy}{5} \times \frac{10}{3y}$	$\frac{10xy}{15y}$	$\frac{2x}{3}$
$\frac{4y}{3x} \div \frac{xy}{6}$	$\frac{4y}{3x} \times \frac{6}{xy}$	$\frac{24y}{3x^2y}$	$\frac{8}{x^2}$
$\frac{x^2}{8} \div \frac{3x}{4y}$	$\frac{x^2}{8} \times \frac{4y}{3x}$	$\frac{4x^2y}{24x}$	$\frac{xy}{6}$
$\frac{6xy}{5} \div \frac{x}{y}$	$\frac{6xy}{5} \times \frac{y}{x}$	$\frac{6xy^2}{5x}$	$\frac{6y^2}{5}$
$\frac{5x}{3} \div \frac{10}{xy}$	$\frac{5x}{3} \times \frac{xy}{10}$	$\frac{5x^2y}{30}$	$\frac{x^2y}{6}$
$\frac{2x}{y} \div \frac{4xy}{9}$	$\frac{2x}{y} \times \frac{9}{4xy}$	$\frac{18x}{4xy^2}$	$\frac{9}{2y^2}$
$\frac{4}{5xy} \div \frac{2y^2}{x^2}$	$\frac{4}{5xy} \times \frac{x^2}{2y^2}$	$\frac{4x^2}{10xy^3}$	$\frac{2x}{5y^3}$
$\frac{2x}{y} \div \frac{8}{3y^2}$	$\frac{2x}{y} \times \frac{3y^2}{8}$	$\frac{6xy^2}{8y}$	$\frac{3xy}{4}$
$\frac{5x}{2y} \div \frac{x}{4y^2}$	$\frac{5x}{2y} \times \frac{4y^2}{x}$	$\frac{20xy^2}{2xy}$	$10y$