

# Fill in the Blanks

# Simplifying Algebraic Fractions

Question	Write Each Term Separately	Simplify Each Variable	Answer
$\frac{10a^2}{2a}$	$\frac{10 \times a^2}{2 \times a}$	$5 \times a$	$5a$
$\frac{9b}{3b}$	$\frac{9 \times b}{3 \times b}$	3	3
$\frac{2a}{4b}$	$\frac{2 \times a}{4 \times b}$	$\frac{1 \times a}{2 \times b}$	$\frac{a}{2b}$
$\frac{12a^3}{3a}$	$\frac{12 \times a^3}{3 \times a}$	$4 \times a^2$	$4a^2$
$\frac{5ab}{a}$	$\frac{5 \times a \times b}{a}$	$5 \times b$	$5b$
$\frac{15a^2}{5ab}$	$\frac{15 \times a^2}{5 \times a \times b}$	$\frac{3 \times a}{b}$	$\frac{3a}{b}$
$\frac{24ab}{4bc}$	$\frac{24 \times a \times b}{4 \times b \times c}$	$\frac{6 \times a}{c}$	$\frac{6a}{c}$
$\frac{6ab^2}{3a^2b}$	$\frac{6 \times a \times b^2}{3 \times a^2 \times b}$	$\frac{2 \times b}{a}$	$\frac{2b}{a}$

Question	Write Each Term Separately	Simplify Each Variable	Answer
$\frac{4a^7}{2a^3}$	$\frac{4 \times a^7}{2 \times a^3}$	$2 \times a^4$	$2a^4$
$\frac{16b^5}{2b^2}$	$\frac{16 \times b^5}{2 \times b^2}$	$8 \times b^3$	$8b^3$
$\frac{2a^9}{10a^2}$	$\frac{2 \times a^9}{10 \times a^2}$	$\frac{1 \times a^7}{5}$	$\frac{a^7}{5}$
$\frac{5a^6}{2a}$	$\frac{5 \times a^6}{2 \times a}$	$\frac{5 \times a^5}{2}$	$\frac{5a^5}{2}$
$\frac{25ab^7}{5b^2}$	$\frac{25 \times a \times b^7}{5 \times b^2}$	$5 \times a \times b^5$	$5ab^5$
$\frac{14a^4b^8}{2a^3b^6}$	$\frac{14 \times a^4 \times b^8}{2 \times a^3 \times b^6}$	$7 \times a \times b^2$	$7ab^2$
$\frac{9ab^5}{3a^2b^3}$	$\frac{9 \times a \times b^5}{3 \times a^2 \times b^3}$	$\frac{3 \times b^2}{a}$	$\frac{3b^2}{a}$
$\frac{15a^4b}{25a^2b^2}$	$\frac{15 \times a^4 \times b}{25 \times a^2 \times b^2}$	$\frac{3 \times a^2}{5 \times b}$	$\frac{3a^2}{5b}$