



Math worksheet on 'Factoring - Simplifying Fraction Multiplication with Factors - Composite to Factored (Level 1)'. Part of a broader unit on 'Factoring, Multiplication, Division, Fractions - Practice'

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Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{35}{21} \times \frac{9}{21}$$

a	b
$\frac{5 \times 7}{3 \times 7} \times \frac{3 \times 3}{3 \times 7}$	$\frac{5 \times 7}{3 \times 11} \times \frac{3 \times 3 \times 3 \times 3}{3 \times 7}$

1 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{7}{4} \times \frac{12}{14}$$

a	$\frac{7}{2 \times 2 \times 2} \times \frac{2 \times 2 \times 2 \times 11}{2 \times 11}$
b	$\frac{7}{2 \times 2} \times \frac{2 \times 2 \times 3}{2 \times 7}$
c	$\frac{7}{11} \times \frac{2 \times 2 \times 2 \times 3}{2 \times 7}$

3 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{2}{5} \times \frac{70}{20}$$

a	$\frac{2}{5} \times \frac{2 \times 5 \times 7}{2 \times 2 \times 5}$	b	$\frac{2}{5} \times \frac{2 \times 5 \times 7}{2}$
c	$\frac{3}{2} \times \frac{2 \times 5 \times 7 \times 7}{2 \times 3 \times 5}$		

4 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{12}{4} \times \frac{2}{4}$$

a	$\frac{2 \times 2 \times 3}{2 \times 2} \times \frac{2}{2 \times 2}$
b	$\frac{2 \times 2 \times 2 \times 2 \times 3}{2 \times 2 \times 2 \times 2} \times \frac{2}{2 \times 2 \times 2}$
c	$\frac{2 \times 2 \times 2}{2 \times 2} \times \frac{11}{2}$

5 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{2}{9} \times \frac{45}{6}$$

a	$\frac{2}{3 \times 3} \times \frac{3 \times 3 \times 5}{2 \times 3}$	b	$\frac{7}{3 \times 2} \times \frac{3 \times 3 \times 5}{2 \times 2 \times 3}$
c	$\frac{2}{3 \times 3} \times \frac{3 \times 3 \times 3 \times 5}{2 \times 3}$		

6 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{15}{42} \times \frac{6}{3}$$

a	$\frac{3 \times 5}{2 \times 3 \times 7} \times \frac{2 \times 3}{3}$	b	$\frac{3 \times 3 \times 5}{2 \times 11 \times 7} \times \frac{2 \times 2 \times 3}{3}$
c	$\frac{3 \times 3}{2 \times 3 \times 7} \times \frac{2 \times 3}{5}$		

7 Use factorization to simplify by showing what factors in this fraction multiplication can be cancelled out

$$\frac{40}{10} \times \frac{1}{6}$$

a	$\frac{2 \times 2 \times 2 \times 5 \times 5}{2} \times \frac{1}{5 \times 5}$
b	$\frac{2 \times 2 \times 2 \times 5}{2 \times 5} \times \frac{1}{2 \times 3}$
c	$\frac{2 \times 2 \times 2 \times 2 \times 5 \times 5}{2 \times 5} \times \frac{3}{2 \times 3}$