



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

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**1** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{42 \times 5}{2 \times 70}$	<b>a</b> $\frac{(2 \times 3 \times 7) \times (5)}{(3) \times (2 \times 5)}$	<b>b</b> $\frac{(11 \times 3 \times 3 \times 7) \times (13)}{(2) \times (2 \times 2 \times 11)}$
	<b>c</b> $\frac{(2 \times 7 \times 7) \times (5)}{(2) \times (2 \times 2 \times 5 \times 3)}$	<b>d</b> $\frac{(2 \times 3 \times 7) \times (7)}{(2) \times (2 \times 5 \times 7)}$
	<b>e</b> $\frac{(2 \times 3 \times 7) \times (5)}{(2) \times (2 \times 5 \times 7)}$	

**2** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{35 \times 21}{42 \times 5}$	<b>a</b> $\frac{(5 \times 7) \times (3 \times 7)}{(2 \times 3 \times 7) \times (5)}$	<b>b</b> $\frac{(7 \times 7) \times (3)}{(2 \times 3 \times 7) \times (5)}$
	<b>c</b> $\frac{(13 \times 7) \times (3 \times 7)}{(2 \times 3) \times (13)}$	<b>d</b> $\frac{(2 \times 7) \times (3 \times 7)}{(2 \times 3 \times 7) \times (5 \times 5)}$
	<b>e</b> $\frac{(5 \times 7) \times (3 \times 7 \times 7)}{(2 \times 3) \times (5)}$	

**3** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{2 \times 30}{35 \times 6}$	<b>a</b> $\frac{(5) \times (2 \times 2 \times 3 \times 5)}{(5 \times 7) \times (2 \times 3)}$	<b>b</b> $\frac{(2) \times (7 \times 3 \times 5)}{(11 \times 7) \times (2 \times 3)}$
	<b>c</b> $\frac{(7) \times (2 \times 3 \times 5)}{(5 \times 7 \times 7) \times (2 \times 3)}$	<b>d</b> $\frac{(2) \times (2 \times 3 \times 5)}{(5 \times 7) \times (2 \times 3)}$
	<b>e</b> $\frac{(13) \times (2 \times 3 \times 5)}{(7) \times (2 \times 5)}$	

**4** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{98 \times 5}{35 \times 35}$	<b>a</b> $\frac{(2 \times 7 \times 7) \times (5)}{(5 \times 7) \times (13 \times 7)}$	<b>b</b> $\frac{(2 \times 7) \times (5)}{(5 \times 5 \times 7) \times (5)}$
	<b>c</b> $\frac{(2 \times 7 \times 7) \times (5)}{(5 \times 7) \times (5 \times 7)}$	<b>d</b> $\frac{(2 \times 7 \times 7 \times 7) \times (5)}{(5) \times (5 \times 7)}$
	<b>e</b> $\frac{(7 \times 7) \times (5)}{(5 \times 3) \times (5)}$	

**5** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{6 \times 15}{45 \times 3}$	<b>a</b> $\frac{(2 \times 3) \times (3)}{(3 \times 3 \times 5) \times (3)}$	<b>b</b> $\frac{(2) \times (3 \times 5)}{(3 \times 5) \times (3)}$
	<b>c</b> $\frac{(3 \times 3) \times (3 \times 3)}{(3 \times 3 \times 5) \times (13)}$	<b>d</b> $\frac{(2 \times 3) \times (3 \times 5)}{(3 \times 3 \times 5) \times (3)}$
	<b>e</b> $\frac{(3) \times (3 \times 5)}{(3 \times 3 \times 3 \times 5) \times (3)}$	

**6** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{84}{2 \times 12}$	<b>a</b> $\frac{(2 \times 2 \times 3 \times 13)}{(2) \times (2 \times 2 \times 3)}$	<b>b</b> $\frac{(2 \times 2 \times 2 \times 3 \times 3 \times 7 \times 7)}{(2) \times (2)}$
	<b>c</b> $\frac{(2 \times 3 \times 3 \times 7)}{(13) \times (2 \times 13)}$	<b>d</b> $\frac{(2 \times 2 \times 2 \times 2 \times 7)}{(3) \times (2 \times 2)}$
	<b>e</b> $\frac{(2 \times 2 \times 3 \times 7)}{(2) \times (2 \times 2 \times 3)}$	<b>f</b> $\frac{(3 \times 2 \times 3 \times 7)}{(2) \times (2 \times 2 \times 3 \times 7)}$

**7** Use factorization to factor each number and show what factors in this fraction can be cancelled out

$\frac{10 \times 21}{75 \times 7}$	<b>a</b> $\frac{(7) \times (3 \times 3)}{(3 \times 5 \times 5 \times 5) \times (7)}$	<b>b</b> $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5 \times 5 \times 5) \times (11)}$
	<b>c</b> $\frac{(5) \times (3 \times 7)}{(3 \times 5 \times 5) \times (7)}$	<b>d</b> $\frac{(2 \times 5) \times (3 \times 13)}{(3 \times 5 \times 5 \times 5) \times (7)}$
	<b>e</b> $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5 \times 5) \times (7)}$	<b>f</b> $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5) \times (7)}$