Name

Factoring - Simplifying Fractions with Factors - Composite to Bracketed Factors

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

$$\frac{10 \times 21}{75 \times 7}$$

A $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5 \times 5) \times (7)}$

B $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5) \times (7)}$

C $\frac{(7) \times (3 \times 3)}{(3 \times 5 \times 5 \times 5) \times (7)}$

D $\frac{(2 \times 5) \times (3 \times 13)}{(3 \times 5 \times 5 \times 5) \times (7)}$

E $\frac{(2 \times 5) \times (3 \times 7)}{(3 \times 5 \times 5 \times 5) \times (11)}$

F $\frac{(5) \times (3 \times 7)}{(3 \times 5 \times 5) \times (7)}$

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

$$\frac{3 \times 45}{9 \times 9}$$

A $\frac{(11) \times (3 \times 3 \times 5)}{(3 \times 3) \times (3 \times 7)}$

B $\frac{(3) \times (3 \times 5)}{(3 \times 3) \times (7)}$

C $\frac{(13) \times (3 \times 3 \times 5)}{(3 \times 3) \times (2 \times 3)}$

D $\frac{(3) \times (3 \times 13 \times 5)}{(11 \times 3) \times (3 \times 3)}$

E $\frac{(11) \times (3 \times 5)}{(3) \times (3 \times 3)}$

F $\frac{(3) \times (3 \times 3 \times 5)}{(3 \times 3) \times (3 \times 3)}$

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

$$\frac{50 \times 3}{25 \times 9}$$

A $\frac{(2 \times 5 \times 5) \times (3)}{(5 \times 5 \times 5) \times (3)}$

B $\frac{(2 \times 5 \times 5) \times (3)}{(5 \times 5) \times (3 \times 3)}$

C $\frac{(2 \times 5 \times 5) \times (3)}{(5 \times 5 \times 5) \times (3 \times 3)}$

D $\frac{(11 \times 5 \times 5) \times (3)}{(5 \times 5 \times 5) \times (3)}$

E $\frac{(2 \times 5 \times 5) \times (3)}{(5) \times (3 \times 3)}$

F $\frac{(2 \times 5 \times 5 \times 5) \times (3 \times 3)}{(2 \times 5 \times 5) \times (7 \times 2)}$

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

$$\frac{42 \times 5}{35 \times 10}$$

A $\frac{(2 \times 3 \times 7) \times (5)}{(5 \times 7) \times (2 \times 5)}$

B $\frac{(3 \times 7) \times (5)}{(5 \times 7) \times (2 \times 5)}$

C $\frac{(2 \times 2 \times 3 \times 7) \times (5)}{(5 \times 7 \times 7) \times (2 \times 5)}$

D $\frac{(2 \times 3) \times (5)}{(5 \times 7) \times (2 \times 5 \times 5)}$

E $\frac{(3 \times 7) \times (5)}{(7 \times 7) \times (2 \times 2 \times 5)}$

F $\frac{(3 \times 5) \times (5)}{(5 \times 7) \times (2 \times 5 \times 5)}$

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

$$\frac{4 \times 10}{30 \times 2}$$

A $\frac{(2 \times 2) \times (2 \times 5)}{(2 \times 3 \times 7) \times (7)}$

B $\frac{(2 \times 2 \times 2) \times (2 \times 5)}{(2 \times 2 \times 3 \times 5 \times 5) \times (2)}$

C $\frac{(2 \times 2) \times (11 \times 5)}{(2 \times 2 \times 3 \times 5) \times (2)}$

D $\frac{(2 \times 2) \times (2 \times 5)}{(2 \times 3 \times 5) \times (2)}$

E $\frac{(2 \times 2) \times (2 \times 5)}{(2 \times 3 \times 7) \times (2 \times 2)}$

F $\frac{(5) \times (5)}{(2 \times 2 \times 3 \times 5) \times (2)}$

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

$$\frac{36}{5 \times 18}$$

A $\frac{(2 \times 2 \times 3 \times 3)}{(5) \times (2 \times 3 \times 3)}$

B $\frac{(2 \times 7 \times 3 \times 3)}{(5) \times (5 \times 3)}$

C $\frac{(2 \times 3 \times 3 \times 3)}{(5) \times (2 \times 3 \times 3)}$

D $\frac{(2 \times 2 \times 5 \times 3)}{(5) \times (11 \times 3)}$

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

$$\frac{6 \times 15}{45 \times 3}$$

A $\frac{(2 \times 3) \times (3)}{(3 \times 3 \times 5) \times (3)}$

B $\frac{(2 \times 3) \times (3 \times 5)}{(3 \times 3 \times 5) \times (3)}$

C $\frac{(2) \times (3 \times 5)}{(3 \times 5) \times (3)}$

D $\frac{(3 \times 3) \times (3 \times 3)}{(3 \times 3 \times 5) \times (13)}$

E $\frac{(3) \times (3 \times 5)}{(3 \times 3 \times 3 \times 5) \times (3)}$

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

$$\frac{70 \times 2}{14 \times 4}$$

A $\frac{(5) \times (2)}{(2 \times 7) \times (11 \times 2)}$

B $\frac{(2 \times 5 \times 7) \times (2)}{(2 \times 7) \times (2 \times 2)}$

C $\frac{(2 \times 5 \times 7) \times (5)}{(2 \times 7) \times (2 \times 2)}$

D $\frac{(2 \times 5 \times 7 \times 7) \times (2)}{(2) \times (2 \times 2)}$

E $\frac{(2 \times 7) \times (2)}{(2 \times 13) \times (2 \times 2)}$

F $\frac{(2 \times 5 \times 7) \times (2)}{(2 \times 7) \times (2 \times 2 \times 2)}$