

Checking Equivalence of Fractions

In order to check if two fractions are equivalent, we cross multiply the fractions. If the product remains the same, then they are considered equivalent otherwise not.

Example 4 : Check whether $\frac{5}{20}$ and $\frac{3}{16}$ are equivalent or not.

Solution :

$$\frac{5}{20} \times \frac{3}{16}$$

$$\Rightarrow 5 \times 16 = 80 \text{ and } 20 \times 3 = 60$$

Here, both products are 80 and 60.

Since the products are not same, the fractions $\frac{5}{20}$ and $\frac{3}{16}$ are not equivalent.



REMEMBER

Cross-multiply : $\frac{l}{m} \times \frac{p}{q}$
 $l \times q = p \times m$



Practice Session 8.2

1. Find three equivalent fractions for the given fractions by multiplying.

(a) $\frac{1}{7}$

(b) $\frac{2}{3}$

(c) $\frac{1}{13}$

(d) $\frac{3}{5}$

(e) $\frac{7}{11}$

2. Find two equivalent fractions for the given fractions by dividing.

(a) $\frac{18}{45}$

(b) $\frac{40}{80}$

(c) $\frac{16}{20}$

(d) $\frac{15}{60}$

(e) $\frac{32}{64}$

3. Fill in the missing number.

(a) $\frac{2}{7} = \frac{\square}{35}$

(b) $\frac{3}{8} = \frac{15}{\square}$

(c) $\frac{42}{54} = \frac{\square}{9}$

(d) $\frac{5}{9} = \frac{\square}{72}$

4. Write an equivalent fraction of $\frac{3}{4}$ with.

(a) denominator 16

(b) numerator 9

(c) denominator 24

5. Find an equivalent fraction of $\frac{48}{80}$ with.

(a) numerator 6

(b) denominator 5

6. Check whether the fractions are equivalent or not.

(a) $\frac{3}{4}, \frac{9}{12}$

(b) $\frac{2}{3}, \frac{12}{18}$

(c) $\frac{4}{9}, \frac{32}{63}$

(d) $\frac{1}{3}, \frac{4}{9}$

COMPARISON OF FRACTIONS

Comparison of Like Fractions

- To compare like fractions, we compare their numerators.
- The fraction with a greater numerator is greater fraction.