

Class: 4

Subject : Mathematics

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Lecture 2 Solution

Chapter: Eight

Fractions (solution)

Note 1 Find larger or smaller. Put the symbol “<” or “>”

Solution:

(1) $\frac{2}{5} \square \frac{3}{5}$ (2) $\frac{3}{8} \square \frac{5}{8}$ (3) $\frac{1}{2} \square \frac{1}{3}$ (4) $\frac{3}{5} \square \frac{3}{10}$

1. Arrange the following from smaller to larger and show it by symbols

(1) $\frac{2}{3}, \frac{2}{9}, \frac{2}{8}, \frac{2}{5}$

Solution: $\frac{2}{9} < \frac{2}{8} < \frac{2}{5} < \frac{2}{3}$

(2) $\frac{3}{7}, \frac{3}{10}, \frac{3}{3}, \frac{3}{5}$

Solution: $\frac{3}{10} < \frac{3}{7} < \frac{3}{5} < \frac{3}{3}$

(3) $\frac{5}{10}, \frac{5}{6}, \frac{5}{15}, \frac{5}{9}$

Solution: $\frac{5}{15} < \frac{5}{10} < \frac{5}{9} < \frac{5}{6}$

8.4 Equivalent Fraction

(1) Find equivalent fraction of $\frac{1}{2}$.

Solution: $\frac{1}{2} = \frac{2}{4} = \frac{3}{6} = \frac{4}{8} = \frac{5}{10}$

(2) Find equivalent fraction of $\frac{2}{3}$.

Solution: $\frac{2}{3} = \frac{6}{9} = \frac{10}{15} = \frac{12}{18}$

(3) Find equivalent fraction of $\frac{1}{3}$.

Solution: $\frac{1}{3} = \frac{3}{9} = \frac{4}{12} = \frac{5}{15} = \frac{6}{18}$

Ex: 2 Using the number lines, find the missing numbers

(1) $\frac{1}{4} = \frac{2}{\square}$

Solution: $\frac{1 \times 2}{4 \times 2} = \frac{2}{\square}$

Ans: $\frac{1}{4} = \frac{2}{\square}$

(3) $\frac{6}{9} = \frac{\square}{3}$

Solution: $\frac{6 \div 3}{9 \div 3} = \frac{\square}{3}$

Ans: $\frac{6}{9} = \frac{\square}{3}$

(2) $\frac{4}{10} = \frac{\square}{5}$

Solution: $\frac{4 \div 2}{10 \div 2} = \frac{\square}{5}$

Ans: $\frac{4}{10} = \frac{\square}{5}$

(4) $\frac{6}{8} = \frac{3}{\square}$

Solution: $\frac{6 \div 2}{8 \div 2} = \frac{3}{\square}$

Ans: $\frac{6}{8} = \frac{3}{\square}$

Ex:3 Find the missing numbers.

(1) $\frac{1}{2} = \frac{\square}{12}$

Solution: $\frac{1 \times 6}{2 \times 6} = \frac{\square}{12}$

Ans: $\frac{1}{2} = \frac{\square}{12}$

(2) $\frac{5}{6} = \frac{10}{\square}$

Solution: $\frac{5 \times 2}{6 \times 2} = \frac{10}{\square}$

Ans: $\frac{5}{6} = \frac{10}{\boxed{12}}$

(3) $\frac{3}{4} = \frac{12}{\boxed{}}$

Solution: $\frac{3 \times 4}{4 \times 4} = \frac{12}{\boxed{16}}$

Ans: $\frac{3}{4} = \frac{12}{\boxed{16}}$

(4) $\frac{7}{8} = \frac{\boxed{}}{24}$

Solution: $\frac{7 \times 3}{8 \times 3} = \frac{\boxed{21}}{24}$

Ans: $\frac{7}{8} = \frac{\boxed{21}}{24}$

Ex:4 Make five equivalent fractions of $\frac{2}{5}$ freely.

Solution: $\frac{2}{5} = \frac{4}{10} = \frac{6}{15} = \frac{8}{20} = \frac{10}{25} = \frac{12}{30}$

Ex:5 Find the missing numbers

(1) $\frac{3}{9} = \frac{\boxed{}}{3}$

Solution: $\frac{3 \div 3}{9 \div 3} = \frac{\boxed{1}}{3}$

Ans: $\frac{3}{9} = \frac{\boxed{1}}{3}$

(2) $\frac{6}{8} = \frac{3}{\boxed{}}$

Solution: $\frac{6 \div 2}{8 \div 2} = \frac{3}{\boxed{4}}$

$$\text{Ans: } \frac{6}{8} = \frac{3}{\boxed{4}}$$

$$(3) \frac{4}{12} = \frac{1}{\boxed{\quad}}$$

$$\text{Solution: } \frac{4 \div 4}{12 \div 4} = \frac{1}{\boxed{3}}$$

$$\text{Ans: } \frac{4}{12} = \frac{1}{\boxed{3}}$$

$$(4) \frac{8}{20} = \frac{\boxed{\quad}}{5}$$

$$\text{Solution: } \frac{8 \div 4}{20 \div 4} = \frac{\boxed{2}}{5}$$

$$\text{Ans: } \frac{8}{20} = \frac{\boxed{2}}{5}$$

Ex:6 Make three equivalent fractions of $\frac{12}{18}$ by dividing numerator and denominator of the fraction by the same number.

$$\text{Solution: } \frac{12 \div 2}{18 \div 2} = \frac{6}{9}$$

$$\frac{12 \div 3}{18 \div 3} = \frac{4}{6}$$

$$\frac{12 \div 6}{18 \div 6} = \frac{2}{3}$$

$$\text{Ans: } \frac{12}{18} = \frac{6}{9} = \frac{4}{6} = \frac{2}{3}$$

Exercise(1)

2. Find the missing numbers.

$$(1) \frac{1}{3} = \frac{\square}{6}$$

$$\text{Solution: } \frac{1 \times 2}{3 \times 2} = \frac{\square}{6}$$

$$\text{Ans: } \frac{1}{3} = \frac{\square}{6}$$

$$(2) \frac{3}{7} = \frac{\square}{28}$$

$$\text{Solution: } \frac{3 \times 4}{7 \times 4} = \frac{\square}{28}$$

$$\text{Ans: } \frac{3}{7} = \frac{\square}{28}$$

$$(3) \frac{3}{4} = \frac{\square}{28}$$

$$\text{Solution: } \frac{3 \times 7}{4 \times 7} = \frac{\square}{28}$$

$$\text{Ans: } \frac{3}{4} = \frac{\square}{28}$$

$$(4) \frac{4}{5} = \frac{12}{\square}$$

$$\text{Solution: } \frac{4 \times 3}{5 \times 3} = \frac{12}{\square}$$

$$\text{Ans: } \frac{4}{5} = \frac{12}{\square}$$

$$(8) \frac{12}{20} = \frac{\square}{5}$$

$$\text{Solution: } \frac{12 \div 4}{20 \div 4} = \frac{\square}{5}$$

$$\text{Ans: } \frac{12}{20} = \frac{\square}{5}$$

$$(9) \frac{28}{36} = \frac{\square}{9}$$

$$\text{Solution: } \frac{28 \div 4}{36 \div 4} = \frac{\square}{9}$$

$$\text{Ans: } \frac{28}{36} = \frac{\square}{9}$$

$$(5) \frac{2}{9} = \frac{16}{\square}$$

$$\text{Solution: } \frac{2 \times 8}{9 \times 8} = \frac{16}{\square 72}$$

$$\text{Ans: } \frac{2}{9} = \frac{16}{\square 72}$$

$$(6) \frac{5}{8} = \frac{30}{\square}$$

$$\text{Solution: } \frac{5 \times 6}{8 \times 6} = \frac{30}{\square 48}$$

$$\text{Ans: } \frac{5}{8} = \frac{30}{\square 48}$$

$$(7) \frac{3}{6} = \frac{\square}{2}$$

$$\text{Solution: } \frac{3 \div 3}{6 \div 3} = \frac{\square 1}{2}$$

$$\text{Ans: } \frac{3}{6} = \frac{\square 1}{2}$$

$$(8) \frac{12}{20} = \frac{\square}{5}$$

$$\text{Solution: } \frac{12 \div 4}{20 \div 4} = \frac{\square 3}{5}$$

$$\text{Ans: } \frac{12}{20} = \frac{3}{5}$$

$$(9) \frac{28}{36} = \frac{\square}{9}$$

$$\text{Solution: } \frac{28 \div 4}{36 \div 4} = \frac{\square 7}{9}$$

Ans: $\frac{28}{36} = \frac{\boxed{7}}{9}$

(10) $\frac{33}{66} = \frac{1}{\boxed{}}$

Solution: $\frac{33 \div 33}{66 \div 33} = \frac{1}{\boxed{2}}$

Ans: $\frac{33}{66} = \frac{1}{\boxed{2}}$

(11) $\frac{5}{65} = \frac{1}{\boxed{}}$

Solution: $\frac{5 \div 5}{65 \div 5} = \frac{1}{\boxed{13}}$

Ans: $\frac{5}{65} = \frac{1}{\boxed{13}}$

(12) $\frac{12}{54} = \frac{2}{\boxed{}}$

Solution: $\frac{12 \div 6}{54 \div 6} = \frac{2}{\boxed{9}}$

Ans: $\frac{12}{54} = \frac{2}{\boxed{9}}$