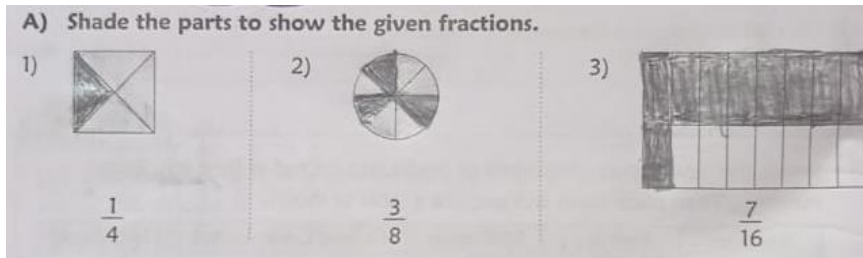


Let's Recall



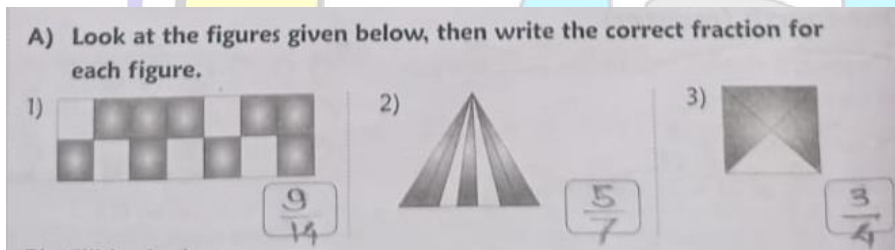
B) Fill in the boxes.

- 1) $\frac{1}{4}$ of 16 boxes is (4) balls.

2) $\frac{1}{3}$ of 27 toffees is (9) toffees.
- 3) $\frac{1}{2}$ of 28 pens is (14) pens.

4) $\frac{1}{5}$ of 25 caps is (5) caps.

Exercise – 7.1



B) Fill in the boxes.

- 1) $\frac{3}{5}$ of 40 = (24)

2) $\frac{3}{6}$ of 36 = (18)
- 3) $\frac{2}{8}$ of 16 = (4)

1) $\frac{3}{4}$ of 24 = (18)

C) Fill in the boxes.

- 1) $\frac{8}{2} = (4)$

2) $\frac{27}{9} = (3)$

3) $\frac{0}{16} = (0)$
- 4) $\frac{14}{1} = (14)$

5) $\frac{18}{3} = (6)$

6) $\frac{14}{7} = (2)$

Exercise – 7.2

A) Circle the like fraction.

$(\frac{8}{16})$, $\frac{2}{3}$, $(\frac{9}{16})$, $(\frac{4}{16})$, $\frac{5}{12}$, $\frac{8}{10}$, $(\frac{7}{16})$

B) Circle the unlike fraction.

$$\frac{3}{10}, \left(\frac{5}{6}\right), \frac{4}{10}, \left(\frac{8}{11}\right), \left(\frac{13}{12}\right), \frac{7}{10}, \left(\frac{6}{13}\right)$$

C) Convert the following into mixed fraction.

$$1) \frac{9}{6} = 1\frac{3}{6} \quad 2) \frac{7}{4} = 1\frac{3}{4} \quad 3) \frac{11}{9} = 1\frac{2}{9} \quad 4) \frac{92}{18} = 5\frac{2}{18}$$

D) Convert the following into Improper fraction.

$$1) 3\frac{7}{9} = \frac{34}{9} \quad 2) 6\frac{2}{3} = \frac{20}{3} \quad 3) 2\frac{3}{5} = \frac{13}{5} \quad 4) 9\frac{2}{3} = \frac{29}{3}$$

E) Write three equivalent fractions for each of the following.

$$1) \frac{13}{2} = \frac{26}{4}, \frac{39}{6}, \frac{52}{8} \quad 2) \frac{4}{9} = \frac{8}{18}, \frac{12}{27}, \frac{16}{36}$$

$$3) \frac{7}{5} = \frac{14}{10}, \frac{21}{15}, \frac{28}{20} \quad 4) \frac{3}{4} = \frac{6}{8}, \frac{9}{12}, \frac{12}{16}$$

F) Use cross multiplication method and find the equivalence of the following pairs of fractions:

$$1) \frac{4}{5} \text{ and } \frac{24}{25}$$

$$\text{Sol- } 4 \times 25 = 24 \times 5$$

$$100 = 120$$

$$\text{So, } 100 \neq 120$$

Therefore, $\frac{4}{5}$ and $\frac{24}{25}$ are not the equivalence pairs.

$$2) 4\frac{2}{7} \text{ and } \frac{60}{14}$$

$$\text{Sol- } \frac{30}{7} \text{ and } \frac{60}{14}$$

$$= 30 \times 14 = 60 \times 7$$

$$= 420 = 420$$

$$\text{So, } 420 = 420$$

Therefore, $4\frac{2}{7}$ and $\frac{60}{14}$ are the equivalence pairs.

$$3) 1\frac{6}{7} \text{ and } 1\frac{18}{21}$$

Sol- $\frac{13}{7}$ and $\frac{39}{21}$

$$= 13 \times 21 = 39 \times 7$$

$$= 273 = 273$$

So, $273 = 273$

Therefore $1\frac{6}{7}$ and $1\frac{18}{21}$ are the equivalence pairs.

4) $\frac{1}{3}$ and $\frac{4}{9}$

Sol- $1 \times 9 = 4 \times 3$

$$9 \neq 12$$

So, $9 \neq 12$

Therefore, $\frac{1}{3}$ and $\frac{4}{9}$ are not the equivalence pairs.

G) Fill in the missing number to make the following fractions equivalent.

1) $\frac{6}{(3)} = \frac{36}{18}$ 2) $\frac{5}{18} = \frac{10}{(36)}$ 3) $\frac{(3)}{6} = \frac{15}{30}$ 4) $\frac{(7)}{6} = \frac{42}{36}$

H) Write the equivalent fractions for each of the following.

1) $\frac{3}{10} = \frac{9}{30}$ 2) $\frac{4}{5} = \frac{24}{30}$ 3) $\frac{2}{3} = \frac{20}{30}$ 4) $\frac{11}{15} = \frac{22}{30}$

Exercise – 7.3

A) Compare the following. (Solve these sums mentally)

1) $\frac{3}{7} < \frac{4}{7}$ 2) $\frac{6}{9} < \frac{7}{9}$ 3) $1\frac{5}{7} < 3\frac{1}{7}$ 4) $5\frac{1}{3} > \frac{14}{3}$

B) Arrange the following in descending order.

1) $\frac{3}{8}, \frac{2}{8}, \frac{7}{8}, \frac{5}{8}, \frac{1}{8} = \frac{7}{8} > \frac{5}{8} > \frac{3}{8} > \frac{2}{8} > \frac{1}{8}$

2) $\frac{6}{10}, \frac{7}{10}, \frac{5}{10}, \frac{4}{10}, \frac{9}{10} = \frac{9}{10} > \frac{7}{10} > \frac{6}{10} > \frac{5}{10} > \frac{4}{10}$

3) $\frac{5}{12}, \frac{1}{12}, \frac{10}{12}, \frac{3}{12}, \frac{9}{12} = \frac{10}{12} > \frac{9}{12} > \frac{5}{12} > \frac{3}{12} > \frac{1}{12}$

Exercise – 7.4

A) Reduce to lowest terms.

1) $\frac{4}{8} = \frac{1}{2}$ 2) $\frac{9}{33} = \frac{3}{11}$ 3) $\frac{12}{28} = \frac{3}{7}$ 4) $\frac{35}{49} = \frac{5}{7}$

B) Which of these fractions are in lowest terms.

1) $\frac{1}{3} = \text{yes}$ 2) $\frac{9}{14} = \text{yes}$ 3) $\frac{24}{40} = \text{no}$ 4) $\frac{88}{77} = \text{no}$

C) Solve

1) Rashid bought 56 bananas . Out of those $\frac{2}{4}$ of the bananas were spoiled , so he could not use them . How many were spoilt?

Sol- Total bananas = 56

Fraction of spoiled bananas = $\frac{2}{4}$

Therefore, No. of bananas spoiled = $\frac{2}{4}$ of 56 = $\frac{2}{4} \times 56 = 2 \times 14 = 28$ bananas

2) During the college elections, Megha got $\frac{2}{7}$ of the 49 Votes . How many votes did Megha get ?

Sol- Total votes = 49

Fraction of votes Megha got = $\frac{2}{7}$

Therefore, No. of votes Megha got = $\frac{2}{7}$ of 49 = $\frac{2}{7} \times 49 = 2 \times 7 = 14$ votes

3) 126 tourists visited Delhi in the month of march . Out of that $\frac{1}{2}$ were from Mumbai. How many people from Mumbai visited Delhi in march ?

Sol- Total tourists = 126

Fraction of tourists from Mumbai = $\frac{1}{2}$

Therefore, No. of tourists from Mumbai = $\frac{1}{2}$ of 126 = $\frac{1}{2} \times 126 = 63$ tourists

4) An auditorium has 72 seats. Out of that $\frac{2}{9}$ are for executive class. How many executive seats does the auditorium have?

Sol- Total seats = 72

$$\text{Fraction of executive seats} = \frac{2}{9}$$

$$\text{Therefore, No. of executive seats} = \frac{2}{9} \text{ of } 72 = \frac{2}{9} \times 72 = 2 \times 8 = 16 \text{ seats}$$

Exercise – 7.5

A) Observe each figure and fill in the blanks given below.

$$(a) \frac{4}{12} + \frac{4}{12} = \frac{(4)+(4)}{12} = \frac{8}{12}$$

$$(b) \frac{4}{16} + \frac{8}{16} + \frac{4}{16} = \frac{(4)+(8)+(4)}{16} = \frac{16}{16}$$

B) Add.

$$1) \frac{2}{10} + \frac{7}{10} = \frac{2+7}{10} = \frac{9}{10}$$

$$2) \frac{6}{9} + \frac{1}{9} = \frac{6+1}{9} = \frac{7}{9}$$

$$3) \frac{2}{13} + \frac{5}{13} + \frac{3}{13} = \frac{2+5+3}{13} = \frac{10}{13}$$

$$4) \frac{7}{14} + \frac{3}{14} + \frac{1}{14} = \frac{7+3+1}{14} = \frac{11}{14}$$

C) Fill in the boxes.

$$1) \frac{4}{12} + \frac{3}{12} = \frac{(7)}{12}$$

$$2) \frac{(3)}{15} + \frac{6}{15} = \frac{9}{15}$$

$$3) \frac{7}{11} + \frac{(2)}{11} = \frac{9}{(11)}$$

$$4) \frac{(4)}{(21)} + \frac{16}{21} = \frac{20}{21}$$

$$5) \frac{(5)}{19} + \frac{5}{19} = \frac{10}{(19)}$$

$$6) \frac{3}{8} + \frac{(4)}{(8)} = \frac{7}{8}$$

Exercise – 7.6

A) Subtract.

$$1) \frac{12}{16} - \frac{3}{16} = \frac{12-3}{16} = \frac{9}{16}$$

$$2) \frac{15}{21} - \frac{7}{21} = \frac{15-7}{21} = \frac{8}{21}$$

$$3) \frac{8}{16} - \frac{7}{16} = \frac{8-7}{16} = \frac{1}{16}$$

$$4) \frac{13}{19} - \frac{7}{19} = \frac{13-7}{19} = \frac{6}{19}$$

$$5) \frac{18}{31} - \frac{18}{31} = \frac{18-18}{31} = \frac{0}{31}$$

C) Fill in the boxes to make sentences correct.

$$1) \frac{7}{16} - \frac{4}{16} = \frac{(3)}{16}$$

$$2) \frac{(19)}{21} - \frac{3}{21} = \frac{16}{(21)}$$

$$3) \frac{5}{8} - \frac{(4)}{(8)} = \frac{1}{8}$$

$$4) \frac{7}{15} - \frac{2}{(15)} = \frac{(5)}{(15)}$$

$$5) \frac{(6)}{(17)} - \frac{3}{17} = \frac{3}{17}$$

$$6) \frac{3}{9} - \frac{(3)}{9} = \frac{0}{(9)}$$

Exercise 7.7

1) A box contains 20 marbles . Out of which 8 are red and 12 are green. Find the fraction of the red marbles .

Sol- Total marble = 20

Red marble = 8

Green marble = 12

So, Fraction of red marble = $\frac{8}{20}$

2) A circle is divided into 10 equal parts . Out of which 4 are coloured . What is the fraction of the coloured part?

Sol- Equal parts = 10

Coloured parts = 4

So, Fraction of coloured part = $\frac{4}{10}$

3) 8 ladies and 4 gent are sitting in a bus . What fraction of ladies are seated in the bus ?

Sol- Ladies = 8

Gents = 4

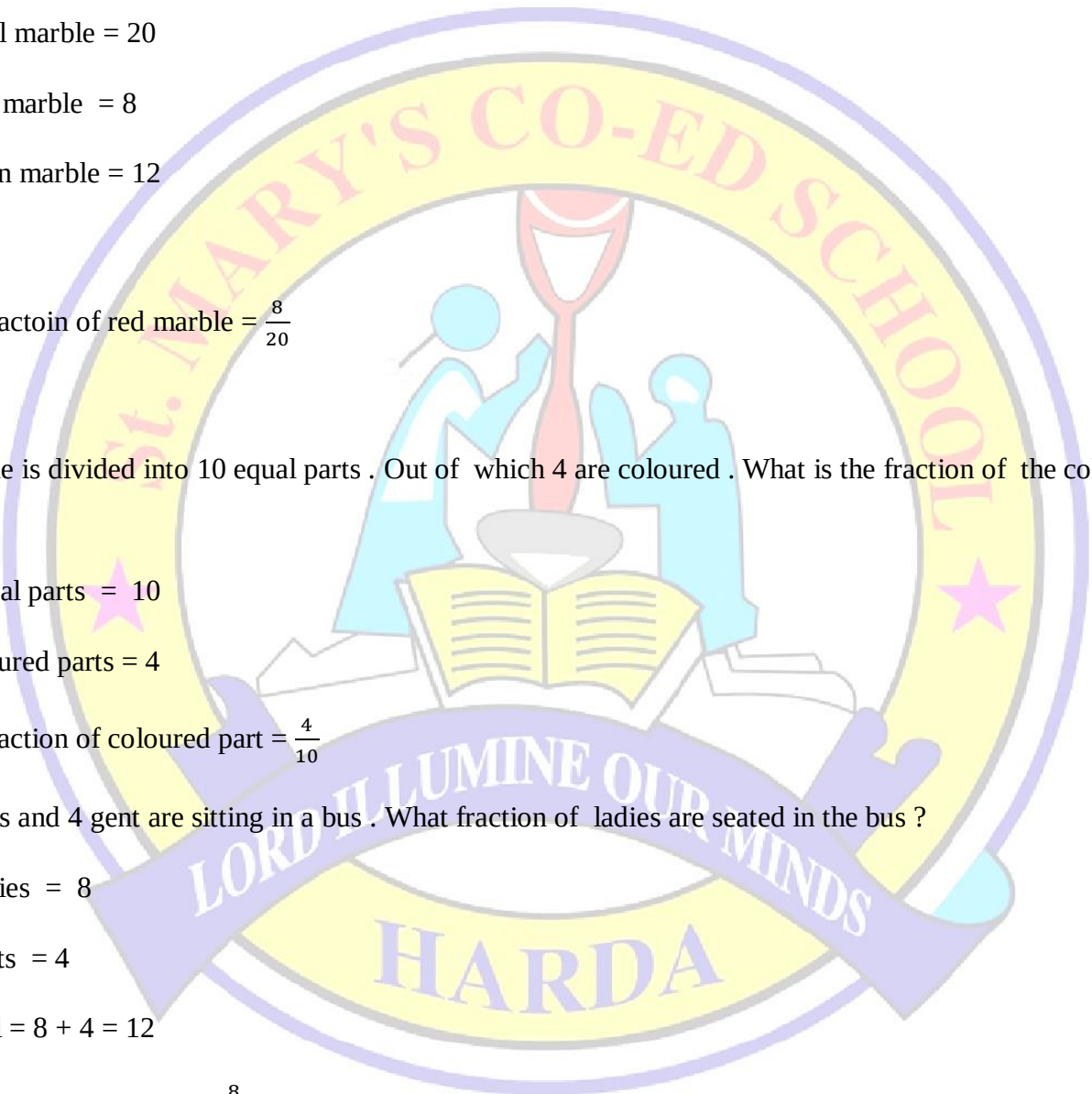
Total = 8 + 4 = 12

So, Fraction of ladies = $\frac{8}{12}$

4) There are 20 flowers in Sonia's garden. She picked half of them to make a garland . How many flowers did she pick ?

Sol- Total flowers = 20

She picked = Half = $\frac{1}{2}$



So, no. of flowers she picked = $\frac{1}{2} \times 20 = 10$ flowers.

5) In a village $\frac{2}{15}$ part of the population is gents $\frac{5}{15}$ boys and $\frac{3}{15}$ girls . What is the fraction of gents , boys and girls together ?

So, Fraction of gents population = $\frac{2}{15}$

Fraction of boys population = $\frac{5}{15}$

Fraction of girls population = $\frac{3}{15}$

So, Fraction of all together = $\frac{2}{15} + \frac{5}{15} + \frac{3}{15} = \frac{10}{15}$

6) Yunus divided a square into 20 equal parts . He coloured $\frac{1}{2}$ part of the square red and $\frac{1}{4}$ part blue . How many parts did he colour red ? How many parts did he colour blue ?

So, Equal parts = 20

Part of red coloured = $\frac{1}{2}$

Part of blue coloured = $\frac{1}{4}$

So, No. of red coloured = $\frac{1}{2} \times 20 = 10$

No. of blue coloured = $\frac{1}{4} \times 20 = 5$

7) Rohan spent $\frac{11}{19}$ parts of his salary on eatables and $\frac{7}{19}$ part of his salary on clothes. How much money did he spend? What part of his salary is left with him?

Sol- Spent on eatable = $\frac{11}{19}$

Spent on cloths = $\frac{7}{19}$

Total money spent = $\frac{11}{19} + \frac{7}{19} = \frac{18}{19}$

So, Money still left with him = $\frac{19}{19} - \frac{18}{19} = \frac{1}{19}$