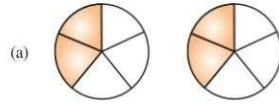
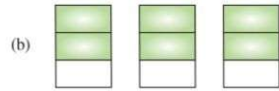


1. ਮਿਲਾਨ ਕਰੋ :-



(a)

(i) $3 \times \frac{1}{4}$

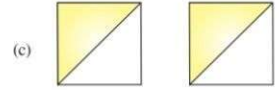


(b)

(ii) $2 \times \frac{2}{5}$

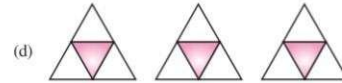
ਕਿਨਾਂ ਅਤੇ ਦਾਸ਼ਮਲਵ

27



(c)

(iii) $3 \times \frac{2}{3}$



(d)

(iv) $2 \times \frac{1}{2}$

2. ਪੂਰਨ ਸੰਖਿਆ ਨੂੰ ਭਿੰਨ ਨਾਲ ਗੁਣਾ ਕਰਕੇ ਨਿਉਨਤਮ ਰੂਪ ਵਿੱਚ ਲਿਖੋ ਅਤੇ ਮਿਸ਼ਰਤ ਭਿੰਨ ਦੇ ਰੂਪ ਵਿੱਚ ਦਰਸਾਓ (ਜੇਕਰ ਸੰਭਵ ਹੋਵੇ)

(i) $4 \times \frac{1}{3}$

(ii) $11 \times \frac{4}{7}$

(iii) $\frac{3}{4} \times 6$

(iv) $\frac{9}{7} \times 5$

(v) $2\frac{5}{6} \times 4$

(vi) $10\frac{5}{6} \times 5$

(vii) $5 \times 6\frac{3}{4}$

(viii) $3\frac{2}{5} \times 8$

3. ਹੱਲ ਕਰੋ :-

(i) 46 ਦਾ $\frac{1}{2}$

(ii) 27 ਦਾ $\frac{2}{3}$

(iii) 36 ਦਾ $\frac{1}{3}$

(iv) 16 ਦਾ $\frac{3}{4}$

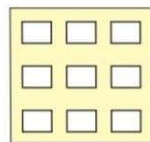
(v) 35 ਦਾ $\frac{5}{7}$

4. ਛਾਇਆ ਅੰਕਿਤ ਕਰੋ:-

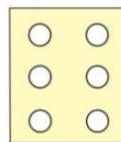
(i) ਬਾਕਸ (a) ਦੇ ਆਇਤਾਂ ਦਾ $\frac{1}{3}$ ਭਾਗ

(ii) ਬਾਕਸ (b) ਦੇ ਚੱਕਰਾਂ ਦਾ $\frac{2}{3}$ ਭਾਗ

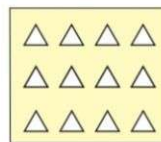
(iii) ਬਾਕਸ (c) ਦੇ ਤ੍ਰਿਭੁਜਾਂ ਦਾ $\frac{1}{2}$ ਭਾਗ



(a)



(b)



(c)

28

ਗਣਿਤ - VII

5. ਰਾਹੁਲ ਹਰ ਮਹੀਨੇ ₹ 44,000 ਕਮਾਉਂਦਾ ਹੈ। ਉਹ ਹਰ ਮਹੀਨੇ ਆਪਣੀ ਆਮਦਨ ਦਾ $\frac{3}{4}$ ਖਰਚ ਕਰਦਾ ਹੈ ਅਤੇ ਬਾਕੀ ਆਮਦਨ ਦੀ ਬੱਚਤ ਕਰਦਾ ਹੈ। ਉਸ ਦੀ ਮਹੀਨਾਵਾਰ ਬੱਚਤ ਪਤਾ ਕਰੋ।

6. ਇੱਕ ਕਿਤਾਬ ਦੀ ਕੀਮਤ ₹ 117 $\frac{1}{2}$ ਹੈ। 8 ਕਿਤਾਬਾਂ ਦੀ ਕੀਮਤ ਪਤਾ ਕਰੋ।

7. ਬਹੁ-ਵਿਕਲਪੀ ਪ੍ਰਸ਼ਨ :-

(i) $\frac{1}{2} \times 8 = \dots\dots$

(a) 8

(b) 2

(c) 4

(d) 1

(ii) 16 ਦਾ $\frac{3}{2} = \dots\dots$

(a) 48

(b) 8

(c) 3

(d) 24

(iii) 40 ਮਿੰਟ, 1 ਘੰਟੇ ਦਾ ਕਿੰਨਵਾਂ ਭਾਗ ਹੈ ?

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

(b) 40

(c) $\frac{1}{4}$

(d) $\frac{1}{2}$

(iv) ਚਿੱਤਰ ਦਾ ਛਾਇਆ ਅੰਕਿਤ ਭਾਗ ਕਿਹੜੀ ਭਿੰਨ ਦਰਸਾਉਂਦਾ ਹੈ ?

(a) $\frac{1}{3}$

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

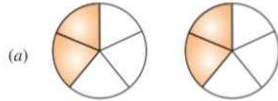
(c) $\frac{3}{4}$

(d) $\frac{1}{2}$



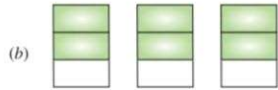


1. Match the following :-



(a)

(i) $3 \times \frac{1}{4}$



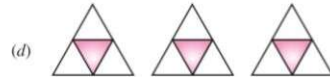
(b)

(ii) $2 \times \frac{2}{5}$



(c)

(iii) $3 \times \frac{2}{3}$



(d)

(iv) $2 \times \frac{1}{2}$

2. Multiply whole number to a fraction and reduce it to the lowest form. Also convert into a mixed fraction :

(i) $4 \times \frac{1}{3}$

(ii) $11 \times \frac{4}{7}$

(iii) $\frac{3}{4} \times 6$

(iv) $\frac{9}{7} \times 5$

(v) $2 \frac{5}{6} \times 4$

(vi) $10 \frac{5}{6} \times 5$

(vii) $5 \times 6 \frac{3}{4}$

(viii) $3 \frac{2}{5} \times 8$

3. Solve :-

(i) $\frac{1}{2}$ of 46

(ii) $\frac{2}{3}$ of 27

(iii) $\frac{1}{3}$ of 36

(iv) $\frac{3}{4}$ of 16

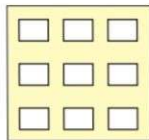
(v) $\frac{5}{7}$ of 35

4. Shade :-

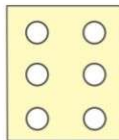
(i) $\frac{1}{3}$ of the rectangles in box (a)

(ii) $\frac{2}{3}$ of the circles in box (b)

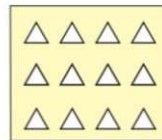
(iii) $\frac{1}{2}$ of the triangles in box (c)



(a)



(b)



(c)

5. Rahul earns ₹ 44,000 per month. He spends $\frac{3}{4}$ th of his income every month and saves the rest of his earning. Find his monthly savings ?

6. The cost of a book is ₹ $117 \frac{1}{2}$. Find the cost of 8 books ?

7. Multiple choice questions :-

(i) $\frac{1}{2} \times 8$ is equal to

(a) 8

(b) 2

(c) 4

(d) 1

(ii) $\frac{3}{2}$ of 16 is

(a) 48

(b) 8

(c) 3

(d) 24

(iii) What fraction of an hour is 40 minutes ?

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

(b) 40

(c) $\frac{1}{4}$

(d) $\frac{1}{2}$

(iv) What fraction does the shaded part of figure 2.4 represent ?

(a) $\frac{1}{3}$

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

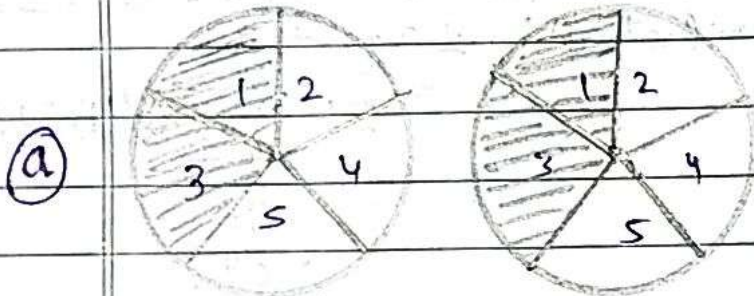
(c) $\frac{3}{4}$

(d) $\frac{1}{2}$



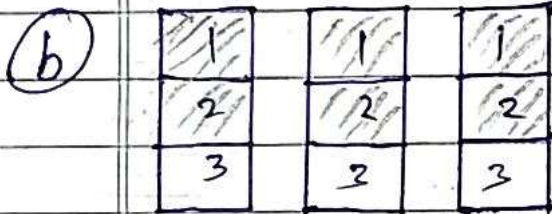
Figure : 2.4

①) प्रश्न को:- Match the following :-



$$= \frac{2}{5} + \frac{2}{5} = 2 \times \frac{2}{5}$$

(i) $3 \times \frac{1}{4}$



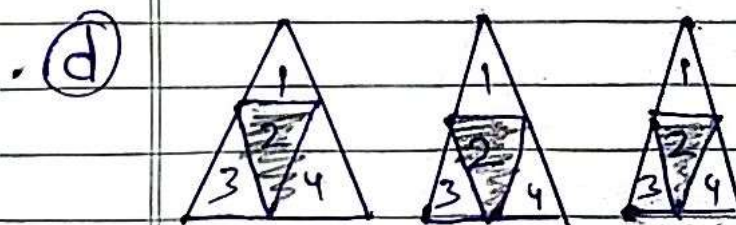
$$= \frac{2}{3} + \frac{2}{3} + \frac{2}{3} = 3 \times \frac{2}{3}$$

(ii) $2 \times \frac{2}{5}$



$$= \frac{1}{2} + \frac{1}{2} = 2 \times \frac{1}{2}$$

(iii) $3 \times \frac{2}{3}$



$$= \frac{1}{4} + \frac{1}{4} + \frac{1}{4} = 3 \times \frac{1}{4}$$

(iv) $2 \times \frac{1}{2}$

Ans.:-

(a) $\longrightarrow$ II
(b) $\longrightarrow$ III
(c) $\longrightarrow$ IV
(d) $\longrightarrow$ I.

$$\# \quad 4 \times \frac{1}{3} = \frac{4}{1} \times \frac{1}{3} = \frac{4 \times 1}{1 \times 3} = \frac{4}{3}$$

- (2) ਮੁਕਾਮੀ ਅੰਕਾਂ ਨੂੰ ਭਿੰਨਾਂ ਨਾਲ ਗੁਣਾ ਕਰਕੇ ਫਿਰ ਨਤੀਜਾ ਗੁਣਾਂ ਨੂੰ ਇੱਕ ਦੂਜੇ ਨਾਲ ਭਿੰਨ ਕਰ ਕੇ ਗੁਣਾਂ ਨੂੰ ਇੱਕ ਰੱਖਣਾ ਹੈ:-

Multiply whole number to a fraction and reduce it to the lowest form. Also convert into a mixed fraction.

(I) $4 \times \frac{1}{3} = \frac{4 \times 1}{3} = \frac{4}{3}$

$$\frac{4}{3} = 1 \frac{1}{3}$$

$$\begin{array}{r} 3 \overline{) 4} \quad (1) \\ \underline{-3} \\ 1 \end{array}$$

over $\leftarrow$ into ਸਦੀ

(II) $11 \times \frac{4}{7} = \frac{11 \times 4}{7} = \frac{44}{7}$

$$\frac{44}{7} = 6 \frac{2}{7}$$

$$\begin{array}{r} 7 \overline{) 44} \quad (6) \\ \underline{-42} \\ 2 \end{array}$$

(III) $\frac{3}{4} \times 6 = \frac{3 \times 6}{4} = \frac{18}{4}$

$$\frac{18}{4} = 4 \frac{2}{4} = \text{This is not lowest form}$$

$$\begin{array}{r} 4 \overline{) 18} \quad (4) \\ \underline{-16} \\ 2 \end{array}$$

(IV) $\frac{9}{7} \times 5 = \frac{9}{7} \times \frac{5}{1} = \frac{9 \times 5}{7 \times 1} = \frac{45}{7}$

$$\frac{45}{7} = 6 \frac{3}{7}$$

$$\begin{array}{r} 7 \overline{) 45} \quad (6) \\ \underline{-42} \\ 3 \end{array}$$

(V) $2 \frac{5}{6} \times 4 = \frac{2 \times 6 + 5}{6} \times 4$

$$= \frac{12 + 5}{6} \times 4 = \frac{17}{6} \times 4 = \frac{17 \times 4}{6} = \frac{68}{6}$$

$$\frac{68}{6} = 11 \frac{2}{6} = \text{This is not lowest form}$$

$$\begin{array}{r} 6 \overline{) 68} \quad (11) \\ \underline{-66} \\ 2 \end{array}$$

Now we learn how to multiply fractions 2

III) $\frac{3}{4} \times 6 = \frac{3 \times 6}{4} = \frac{18}{4}$

$\frac{18}{4} = \frac{9}{2}$ = Lowest form
 પ્રથમ સ્વરૂપ

$\frac{9}{2} = 4 \frac{1}{2}$ = Mixed Fraction
 મિશ્ર સ્વરૂપ

$$\begin{array}{r} 2 \overline{) 9} 4 \\ \underline{-8} \\ 1 \end{array}$$

IV) $2 \frac{5}{6} \times 4 = \frac{12+5}{6} \times 4 = \frac{17}{6} \times 4$

$\frac{17}{6} \times 4 = \frac{17 \times 4}{6} = \frac{68}{6}$

$\frac{68}{6} = \frac{34}{3}$ = Lowest Form
 પ્રથમ સ્વરૂપ

$\frac{34}{3} = 11 \frac{1}{3}$ = Mixed Fraction
 મિશ્ર સ્વરૂપ

$$\begin{array}{r} 3 \overline{) 34} 11 \\ \underline{-3} \\ 4 \\ \underline{-3} \\ 1 \end{array}$$

V) ~~$10 \times \frac{5}{6}$~~ $10 \frac{5}{6} \times 5$

$= \frac{10 \times 6 + 5}{6} \times \frac{5}{1} = \frac{60+5}{6} \times \frac{5}{1} = \frac{65}{6} \times \frac{5}{1}$

$= \frac{65 \times 5}{6 \times 1} = \frac{325}{6}$ = Lowest Form

$\frac{325}{6} = 54 \frac{1}{6}$ = Mixed Fraction

$$\begin{array}{r} 6 \overline{) 325} 54 \\ \underline{-30} \\ 25 \\ \underline{-24} \\ 1 \end{array}$$

VII) $5 \times 6 \frac{3}{4} = 5 \times \frac{6 \times 4 + 3}{4} = 5 \times \frac{24+3}{4}$

$= \frac{5}{1} \times \frac{27}{4} = \frac{5 \times 27}{1 \times 4} = \frac{135}{4}$ = Lowest Form

$\frac{135}{4} = 33 \frac{3}{4}$ = Mixed Fraction

$$\begin{array}{r} 4 \overline{) 135} 33 \\ \underline{-12} \\ 15 \\ \underline{-12} \\ 3 \end{array}$$

VIII) $3 \times \frac{2}{5} \times 8 = \frac{5 \times 3 + 2}{5} \times 8 = \frac{15 + 2}{5} \times 8$
 $= \frac{17}{5} \times \frac{8}{1} = \frac{17 \times 8}{5 \times 1} = \frac{136}{5} = \text{Lowest Form}$

$\frac{136}{5} = 27 \frac{1}{5} = \text{Mixed Frac.}$

$$\begin{array}{r} 5 \overline{) 136} \quad (27) \\ \underline{-10} \\ 36 \\ \underline{-35} \\ 1 \end{array}$$

3. जल वर :-

(I) 46 र $\frac{1}{2}$

$$= 46 \times \frac{1}{2} = \frac{46}{1} \times \frac{1}{2}$$

$$= \frac{46 \times 1}{2} = \frac{46}{2} = 23$$

Solve :-

$$\frac{1}{2} \text{ of } 46 = \frac{1}{2} \times 46$$

$$= \frac{1 \times 46}{2} = \frac{46}{2} = 23$$

$$\begin{array}{r} 2 \overline{) 46} \quad (23) \\ \underline{-4} \\ 6 \\ \underline{-6} \\ 0 \end{array}$$

दा तरी $\times$ (गुण) करण 31

$\text{of} = \text{multiply} (\times)$

(II) 27 र $\frac{2}{3}$

$$= 27 \times \frac{2}{3} = \frac{27 \times 2}{3}$$

$$= \frac{9 \times 2}{1} = 18$$

$$\frac{2}{3} \text{ of } 27 = \frac{2}{3} \times 27$$

$$= \frac{2 \times 27}{3} = 2 \times 9 = 18$$

(III) $\frac{1}{3}$ of 36 = $\frac{1}{3} \times 36$

$$= \frac{1 \times 36}{3} = 12$$

$$36 \text{ र } \frac{1}{3} = 36 \times \frac{1}{3}$$

$$= \frac{36 \times 1}{3} = 12$$

(IV) 16 र $\frac{3}{4}$ = $16 \times \frac{3}{4}$

$$= \frac{16 \times 3}{4} = 4 \times 3 = 12$$

$$\frac{3}{4} \text{ of } 16 = \frac{3}{4} \times 16$$

$$= \frac{3 \times 16}{4} = 3 \times 4 = 12$$

$$\textcircled{V} \quad 35 \text{ of } \frac{5}{7} = 35 \times \frac{5}{7} \quad \frac{5}{7} \text{ of } 35 = \frac{5}{7} \times 35$$

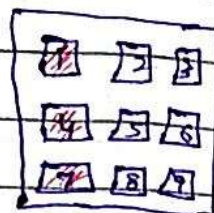
$$= \frac{35 \times 5}{7} = 5 \times 5 = 25 \quad = \frac{5 \times 35}{7} = 5 \times 5 = 25$$

4. ਛਾਇਆ ਅੰਕਿਤ ਕਰੋ:- Shade :-

① ਬਾਕਸ (a) ਦੇ ਮਾਣਿਤਾਂ ਦੇ $\frac{1}{3}$ ਭਾਗ

= ~~ਕੁੱਝ~~ ਕੁੱਝ ਮਾਣਿਤਾਂ ਦੇ $\frac{1}{3}$ = 9 ਦੇ $\frac{1}{3}$

= $\frac{9 \times 1}{3} = 3$ ਭਾਗ

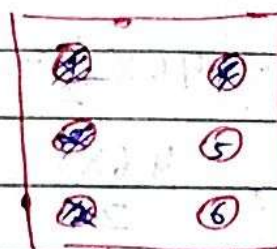


①

② ਬਾਕਸ (b) ਦੇ ਚੱਕਰਾਂ ਦੇ $\frac{2}{3}$ ਭਾਗ

= ~~ਕੁੱਝ~~ ਕੁੱਝ ਚੱਕਰਾਂ ਦੇ $\frac{2}{3}$

= 6 ਦੇ $\frac{2}{3} = \frac{6 \times 2}{3} = 4$



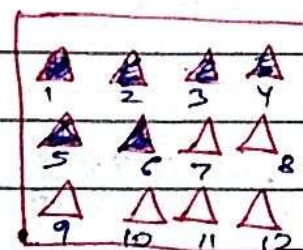
②

③ ਬਾਕਸ (c) ਦੇ ਤ੍ਰਿਭੁਜਾਂ ਦੇ $\frac{1}{2}$ ਭਾਗ

= ਕੁੱਝ ਤ੍ਰਿਭੁਜਾਂ ਦੇ $\frac{1}{2} = 12$ ਦੇ $\frac{1}{2}$

= $12 \times \frac{1}{2} = \frac{12 \times 1}{2} = 6 \times 1$

= 6



③

4. ① $\frac{1}{3}$ of the rectangles in box (a).

= $\frac{1}{3}$ of total rectangles = $\frac{1}{3}$ of 9

= $\frac{1}{3} \times 9 = \frac{1 \times 9}{3} = 1 \times 3 = 3$

② $\frac{2}{3}$ of the circles in box (b).

= $\frac{2}{3}$ of total circles = $\frac{2}{3}$ of 6

= $\frac{2}{3} \times 6 = \frac{2 \times 6}{3} = 2 \times 2 = 4$

III) $\frac{1}{2}$ of the triangles in box (C).

= $\frac{1}{2}$ of total triangles.

$$= \frac{1}{2} \text{ of } 12 = \frac{1}{2} \times 12 = \frac{1 \times 12}{2}$$

$$= 1 \times 6 = 6,$$

⑤ Ans. = જામગીરે દી રકમદી = 44,000 રૂ. = આમદ
 ચરચ = આમદ રૂ $\frac{3}{4}$ = 44000 રૂ $\frac{3}{4}$

$$= \frac{44000}{1} \times \frac{3}{4} = \frac{44000 \times 3}{4}$$

$$= 11000 \times 3 = 33000 રૂ.$$

∴ ચરચ = આમદ - ચરચ

$$= 44000 - 33000$$

$$= 11000 રૂ.$$

$$\begin{array}{r} 44000 \\ - 33000 \\ \hline 11000 \end{array}$$

Income = 44,000 Rs.

Spend = $\frac{3}{4}$ of income = $\frac{3}{4}$ of 44000

$$= \frac{3}{4} \times 44000 = \frac{3 \times 44000}{4}$$

$$= 3 \times 11000 = 33000 Rs.$$

His Saving = Income - Spending

$$= 44000 - 33000$$

$$= 11000 Rs.$$

$$117\frac{1}{2} = 117.5 \text{ ₹}$$

Page:

Date: / /

⑥ Ans. = 1 किताब की कीमत = $117\frac{1}{2}$ ₹
cost of a book = $\frac{2 \times 117 + 1}{2}$

$$\begin{array}{r} 117 \\ \times 2 \\ \hline 234 \end{array}$$

$$= \frac{234 + 1}{2} = \frac{235}{2}$$

8 किताबों की कीमत = $8 \times \frac{235}{2}$
cost of 8 books = $\frac{8 \times 235}{2}$

$$\begin{array}{r} 12 \\ 235 \\ \times 4 \\ \hline 940 \end{array}$$

$$= \frac{8 \times 235}{2} = 4 \times 235$$

$$= 940 \text{ ₹}$$

⑦ Multiple choice question:-

① $\frac{1}{2} \times 8 = \underline{\hspace{2cm}}$ $\frac{1}{2} \times 8$ is equal to

$$= \frac{1}{2} \times 8 = \frac{1 \times 8}{2} = 1 \times 4 = 4 = \text{③}$$

① 8 ② 2 ③ 4 ④ 1

⑧ 16 ₹ $\frac{3}{2} = \underline{\hspace{2cm}}$ $\frac{3}{2}$ of 16 is

$$= 16 \times \frac{3}{2} = \frac{16 \times 3}{2} = 8 \times 3 = 24 = \text{④}$$

① 48 ② 8 ③ 3 ④ 24

⑨ 40 Part, 1 hr के किताबें? What fraction of an hour is 40 min?

$$= 1 \text{ hr} = 60 \text{ Part}$$

$$1 \text{ hour} = 60 \text{ minutes}$$

$$= \frac{40 \text{ Part}}{60 \text{ Part}} = \frac{40}{60} = \frac{4}{6} = \frac{2}{3} = \text{①}$$

① $\frac{2}{3}$ ② 40 ③ $\frac{1}{4}$ ④ $\frac{1}{2}$

⑩ ① $\frac{1}{3}$ ② $\frac{2}{3}$ ③ $\frac{3}{4}$ ④ $\frac{1}{2}$

$$= \frac{3}{4} = \text{③}$$

