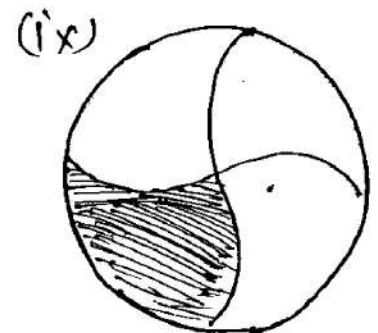
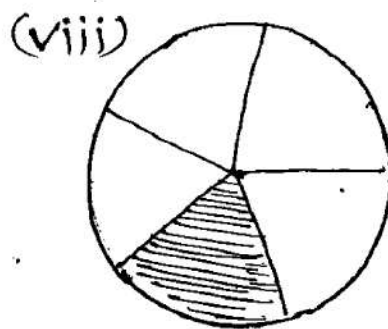
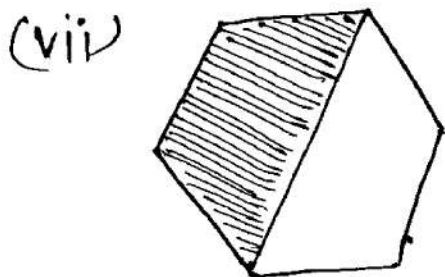
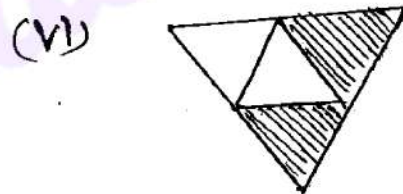
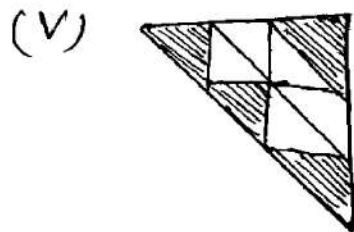
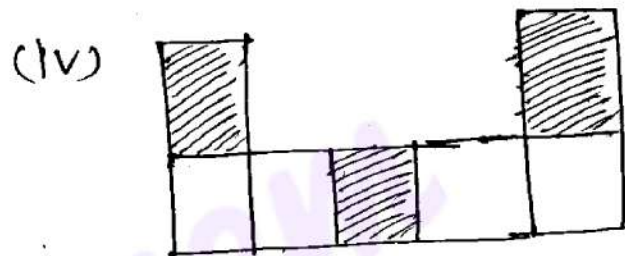
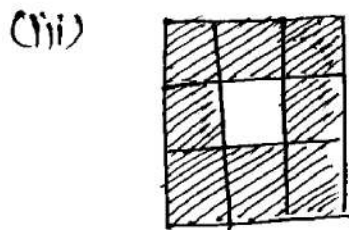
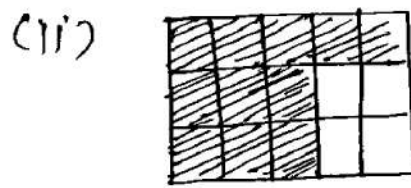
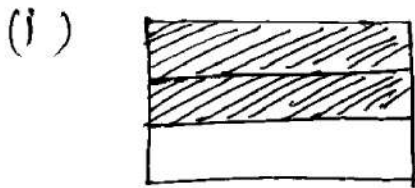


Chapter - 6 Fractions

Exercise 6.1

Q.1 Write the fractions representing the shaded portions:



Solution: (i) Shaded part = 2

Total Parts = 3

$\therefore$ fraction of shaded part = $\frac{2}{3}$

(ii) Shaded part = 11

Total Parts = 15

$\therefore$ fraction of shaded part = $\frac{11}{15}$

(iii) Shaded part = 8

Total Parts = 9

$\therefore$ fraction of shaded part = $\frac{8}{9}$

(iv) Shaded part = 3

Total Parts = 7

$\therefore$ fraction of shaded part = $\frac{3}{7}$

(v) Shaded part = 4

Total parts = 9

$\therefore$ fraction of shaded part = $\frac{4}{9}$

(vi) Shaded part = 2

Total parts = 4

$\therefore$ fraction of shaded part = $\frac{2}{4} = \frac{1}{2}$

(vii) Shaded part = 1

Total parts = 2

$\therefore$ fraction of shaded part = $\frac{1}{2}$

(viii) Shaded part = 1

Total Parts = 5

$\therefore$ fraction of shaded part = $\frac{1}{5}$

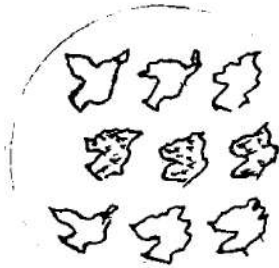
(ix) Shaded part = 1

Total parts = 4

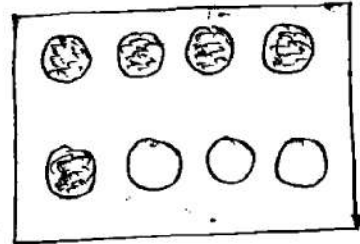
$\therefore$ fraction of shaded part = $\frac{1}{4}$

Q.2 Write the fractions representing the shaded parts

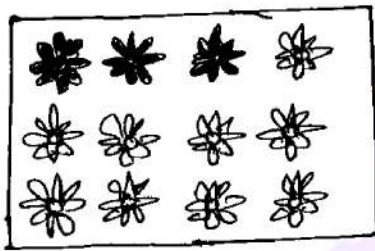
(i)



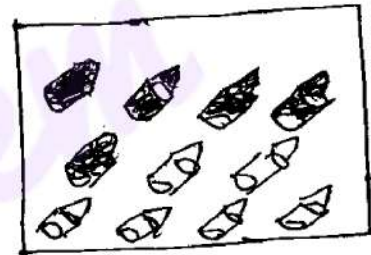
(ii)



(iii)



(iv)



Solution: (i) Total Parts = 9
Shaded = 3

$\therefore$ fraction of shaded part = $\frac{3}{9} = \frac{1}{3}$

(ii) Total Parts = 8
Shaded = 5

$\therefore$ fraction of shaded part = $\frac{5}{8} = \frac{5}{8}$

(iii) Total parts = 12
Shaded = 3

$\therefore$ fraction of shaded part = $\frac{3}{12} = \frac{1}{4}$

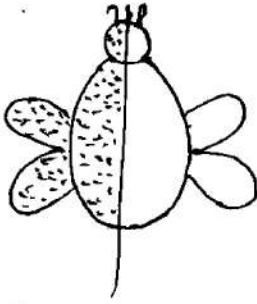
(iv) Total parts = 10

Shaded = 5

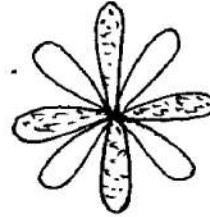
$\therefore$ fraction of shaded part = $\frac{5}{10} = \frac{1}{2}$

Q.3 Write the fraction representing the shaded region.

(i)



(ii)



Solution! (i) In given figure

Total portion = 2

Shaded portion = 1

$\therefore$ fraction of shaded portion = $\frac{1}{2}$

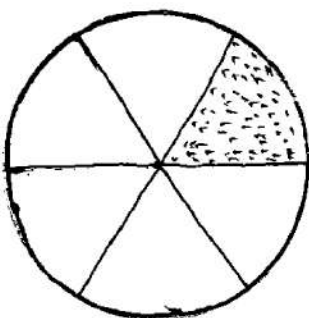
(ii) here, Total portions = 8

Shaded portion = 4

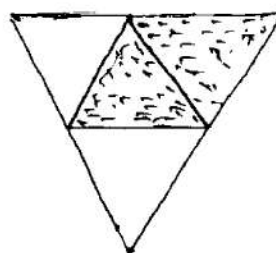
$\therefore$ fraction of shaded portion = $\frac{4}{8} = \frac{1}{2}$

Q.4 Colour the part according to the fractions given

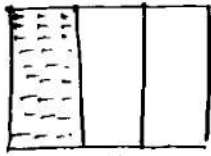
(i) $\frac{1}{6}$



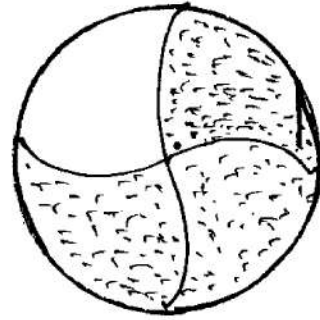
(ii) $\frac{2}{4}$



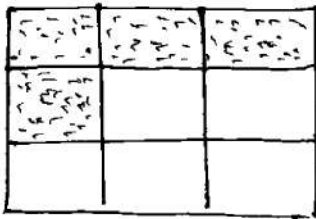
(iii) $\frac{1}{3}$



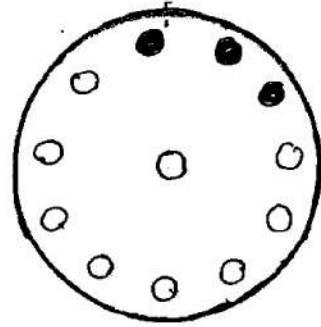
(iv) $\frac{3}{4}$



(v) $\frac{4}{9}$



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



here $\frac{3}{12} = \frac{1}{4}$

Q.5 What fraction of an hour is 20 minutes?

Solution: As, we know that

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

$$\therefore 20 \text{ minutes of an hour} = \frac{20}{60} = \frac{1}{3}$$

Q.6 Write the natural numbers from 2 to 12. What fraction of them are prime numbers?

Solution! Natural numbers from 2 to 12 are

$$2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12$$

$$\text{Total natural numbers} = 11$$

$$\text{out of these prime numbers} = 2, 3, 5, 7, 11$$

$$\therefore \text{fraction of prime numbers} = \frac{5}{11}$$

7. Write the natural numbers from 102 to 113.
What fraction of them are prime numbers.

Solution : Possible natural numbers are

102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113

out of these prime numbers are:

103, 107, 109, 113

∴ Total natural numbers = 12

Total Prime numbers = 4

∴ fraction of Prime numbers = $\frac{4}{12} = \frac{1}{3}$

Q.8 Mukesh has a box of 24 Pencils. He gives half of them to Sunita. How many does Sunita get? How many does Mukesh still have?

Solution : Total Pencils = 24

Sunita got = $\frac{1}{2}$ of 24 = $\frac{1}{2} \times 24$
= 12 Pencils

∴ Sunita got 12 Pencils.

hence Mukesh got = $24 - 12$
= 12 Pencils.

Q.9 Kavita has 24 Cassettes. She gives $\frac{3}{4}$ of them to Sonia. How many does Sonia get? How many does Kavita keep?

Solution: Total cassettes Kavita have = 44

Cassettes given to Sonia = $\frac{3}{4}$ of 44

$$= \frac{3}{4} \times 44 = 33$$

$\therefore$ Sonia get 33 cassettes.

hence Kavita keeps $44 - 33 = 11$ cassettes.

Q.10 Shikha has three frocks that she wears when playing. The material is good, but the colours are faded. Her mother buys some blue dye and uses it on two of the frocks. What fraction of all ~~are~~ of the Shikha play frocks did her mother dye?

Solution: Total frocks Shikha has = 3 frocks.

No. of frocks dye = 2 frocks

$\therefore$ fraction of frocks dye = $\frac{2}{3}$