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(Affiliated to CBSE up to +2 Level)

CLASS: VII

SUB.: MATHS (NCERT BASED)

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### FRACTION AND DECIMAL (REVISION)

#### **EX 2.1 (NCERT)**

- Solve:

- (i)  $2-\frac{3}{5}$  (ii)  $4+\frac{7}{8}$  (iii)  $\frac{3}{5}+\frac{2}{7}$  (iv)  $\frac{9}{11}-\frac{4}{15}$
- (v)  $\frac{7}{10} + \frac{2}{5} + \frac{3}{2}$  (vi)  $2\frac{2}{3} + 3\frac{1}{2}$  (vii)  $8\frac{1}{2} 3\frac{5}{8}$
- 2. Arrange the following in descending order:

  - (i)  $\frac{2}{9}, \frac{2}{3}, \frac{8}{21}$  (ii)  $\frac{1}{5}, \frac{3}{7}, \frac{7}{10}$
- 3. In a "magic square", the sum of the numbers in each row, in each column and along the diagonals is the same. Is this a magic square?

4	9	2
11	11	11
3	5	7
11	11	11
8	1	6
11	11	11

(Along the first row  $\frac{4}{11} + \frac{9}{11} + \frac{2}{11} = \frac{15}{11}$ ).

7. Ritu ate  $\frac{3}{5}$  part of an apple and the remaining apple was eaten by her brother Somu.

How much part of the apple did Somu eat? Who had the larger share? By how much?

8. Michael finished colouring a picture in  $\frac{7}{12}$  hour. Vaibhav finished colouring the same

picture in  $\frac{3}{4}$  hour. Who worked longer? By what fraction was it longer?

- 1. Which of the drawings (a) to (d) show:
  - (i)  $2 \times \frac{1}{5}$

- (ii)  $2 \times \frac{1}{2}$  (iii)  $3 \times \frac{2}{3}$  (iv)  $3 \times \frac{1}{4}$





- 2. Some pictures (a) to (c) are given below. Tell which of them show:

  - (i)  $3 \times \frac{1}{5} = \frac{3}{5}$  (ii)  $2 \times \frac{1}{3} = \frac{2}{3}$
- (iii)  $3 \times \frac{3}{4} = 2\frac{1}{4}$













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z.	Multiply and	reduce to	lowest form	(11)	possible	) :

(i) 
$$\frac{2}{3} \times 2\frac{2}{3}$$
 (ii)  $\frac{2}{7} \times \frac{7}{9}$  (iii)  $\frac{3}{8} \times \frac{6}{4}$  (iv)  $\frac{9}{5} \times \frac{3}{5}$ 

(ii) 
$$\frac{2}{7} \times \frac{7}{9}$$

(iii) 
$$\frac{3}{8} \times \frac{6}{4}$$

(iv) 
$$\frac{9}{5} \times \frac{3}{5}$$

(v) 
$$\frac{1}{3} \times \frac{15}{8}$$

(v) 
$$\frac{1}{3} \times \frac{15}{8}$$
 (vi)  $\frac{11}{2} \times \frac{3}{10}$  (vii)  $\frac{4}{5} \times \frac{12}{7}$ 

(vii) 
$$\frac{4}{5} \times \frac{12}{7}$$

#### Multiply the following fractions

(i) 
$$\frac{2}{5} \times 5\frac{1}{4}$$

(i) 
$$\frac{2}{5} \times 5\frac{1}{4}$$
 (ii)  $6\frac{2}{5} \times \frac{7}{9}$  (iii)  $\frac{3}{2} \times 5\frac{1}{3}$  (iv)  $\frac{5}{6} \times 2\frac{3}{7}$ 

(iii) 
$$\frac{3}{2} \times 5\frac{1}{3}$$

(iv) 
$$\frac{5}{6} \times 2\frac{3}{7}$$

(v) 
$$3\frac{2}{5} \times \frac{4}{7}$$

(vi) 
$$2\frac{3}{5} \times 3$$

(v) 
$$3\frac{2}{5} \times \frac{4}{7}$$
 (vi)  $2\frac{3}{5} \times 3$  (vii)  $3\frac{4}{7} \times \frac{3}{5}$ 

#### 4. Which is greater:

(i) 
$$\frac{2}{7}$$
 of  $\frac{3}{4}$  or  $\frac{3}{5}$  of  $\frac{3}{5}$ 

(i) 
$$\frac{2}{7}$$
 of  $\frac{3}{4}$  or  $\frac{3}{5}$  of  $\frac{5}{8}$  (ii)  $\frac{1}{2}$  of  $\frac{6}{7}$  or  $\frac{2}{3}$  of  $\frac{3}{7}$ 

# Saili plants 4 saplings, in a row, in her garden. The distance between two adjacent saplings is $\frac{3}{4}$ m. Find the distance between the first and the last sapling.

7. A car runs 16 km using 1 litre of petrol. How much distance will it cover using 
$$2\frac{3}{4}$$
 litres of petrol.

**8.** (a) (i) Provide the number in the box 
$$\square$$
, such that  $\frac{2}{3} \times \square = \frac{10}{30}$ .



(b) (i) Provide the number in the box 
$$\square$$
, such that  $\frac{3}{5} \times \square = \frac{24}{75}$ .

#### Multiply and reduce to lowest form (if possible):

(i) 
$$\frac{2}{3} \times 2\frac{2}{3}$$
 (ii)  $\frac{2}{7} \times \frac{7}{9}$  (iii)  $\frac{3}{8} \times \frac{6}{4}$  (iv)  $\frac{9}{5} \times \frac{3}{5}$ 

(ii) 
$$\frac{2}{7} \times \frac{7}{9}$$

(iii) 
$$\frac{3}{8} \times \frac{6}{4}$$

(iv) 
$$\frac{9}{5} \times \frac{3}{5}$$

(v) 
$$\frac{1}{3} \times \frac{15}{8}$$

(vi) 
$$\frac{11}{2} \times \frac{3}{10}$$

(v) 
$$\frac{1}{3} \times \frac{15}{8}$$
 (vi)  $\frac{11}{2} \times \frac{3}{10}$  (vii)  $\frac{4}{5} \times \frac{12}{7}$ 

#### Multiply and reduce to lowest form (if possible):

(i) 
$$\frac{2}{3} \times 2\frac{2}{3}$$
 (ii)  $\frac{2}{7} \times \frac{7}{9}$  (iii)  $\frac{3}{8} \times \frac{6}{4}$  (iv)  $\frac{9}{5} \times \frac{3}{5}$ 

(ii) 
$$\frac{2}{7} \times \frac{7}{9}$$

(iii) 
$$\frac{3}{8} \times \frac{6}{4}$$

(iv) 
$$\frac{9}{5} \times \frac{3}{5}$$

(v) 
$$\frac{1}{3} \times \frac{15}{8}$$

(v) 
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 (vi)  $\frac{11}{2} \times \frac{3}{10}$  (vii)  $\frac{4}{5} \times \frac{12}{7}$ 

(vii) 
$$\frac{4}{5} \times \frac{12}{7}$$

#### Multiply the following fractions:

# Exercise 2.4

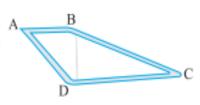
- Find:

  - (i)  $12 \div \frac{3}{4}$  (ii)  $14 \div \frac{5}{6}$  (iii)  $8 \div \frac{7}{3}$  (iv)  $4 \div \frac{8}{3}$

- 2. Find the reciprocal of each of the following fractions. Classify the reciprocals as proper fractions, improper fractions and whole numbers.

- Find:

- (i)  $\frac{7}{3} \div 2$  (ii)  $\frac{4}{9} \div 5$  (iii)  $\frac{6}{13} \div 7$  (iv)  $4\frac{1}{3} \div 3$
- (v)  $3\frac{1}{2} \div 4$  (vi)  $4\frac{3}{7} \div 7$
- 4. Find:
- (i)  $\frac{2}{5} \div \frac{1}{2}$  (ii)  $\frac{4}{9} \div \frac{2}{3}$  (iii)  $\frac{3}{7} \div \frac{8}{7}$  (iv)  $2\frac{1}{3} \div \frac{3}{5}$  (v)  $3\frac{1}{2} \div \frac{8}{3}$
- (vi)  $\frac{2}{5} \div 1\frac{1}{2}$  (vii)  $3\frac{1}{5} \div 1\frac{2}{3}$  (viii)  $2\frac{1}{5} \div 1\frac{1}{5}$
- Express in kg:
  - (i) 200 g
- (ii) 3470 g
- (iii) 4 kg 8 g
- Write the following decimal numbers in the expanded form:
  - (i) 20.03
- (ii) 2.03
- (iii) 200.03
- (iv) 2.034
- 6. Write the place value of 2 in the following decimal numbers:
  - (i) 2.56
- (ii) 21.37
- (iii) 10.25
- (iv) 9.42
- (v) 63.352.
- Dinesh went from place A to place B and from there to place C. A is 7.5 km from B and B is A 12.7 km from C. Ayub went from place A to place D and from there to place C. D is 9.3 km from A and C is 11.8 km from D. Who travelled more and by how much?



- Shyama bought 5 kg 300 g apples and 3 kg 250 g mangoes. Sarala bought 4 kg 800 g oranges and 4 kg 150 g bananas. Who bought more fruits?
- How much less is 28 km than 42.6 km?

# Exercise 2.6

- Find:
  - (i) 0.2 × 6
- (ii) 8 × 4.6
- (iii) 2.71 × 5
- (iv) 20.1 × 4

- (v) 0.05 × 7
- (vi) 211.02 × 4
- (vii) 2 × 0.86
- Find the area of rectangle whose length is 5.7cm and breadth is 3 cm.
- Find:
  - (i) 1.3 × 10
- (ii)  $36.8 \times 10$
- (iii)  $153.7 \times 10$
- (iv) 168.07 × 10

- (v) 31.1 × 100 (vi) 156.1 × 100 (vii) 3.62 × 100
- (viii) 43.07 × 100

- (ix)  $0.5 \times 10$
- (x)  $0.08 \times 10$
- (xi) 0.9 × 100
- (xii)  $0.03 \times 1000$
- 4. A two-wheeler covers a distance of 55.3 km in one litre of petrol. How much distance will it cover in 10 litres of petrol?
- Find:
  - (i) 2.5 × 0.3
- (ii) 0.1 × 51.7
- (iii)  $0.2 \times 316.8$
- (iv) 1.3 × 3.1

- (v) 0.5 × 0.05
- (vi) 11.2 × 0.15
- (vii)  $1.07 \times 0.02$
- (viii)  $10.05 \times 1.05$  (ix)  $101.01 \times 0.01$
- (x) 100.01 × 1.1

#### Exercise 2.7

- 1. Find:
  - (i)  $0.4 \div 2$
- (ii)  $0.35 \div 5$
- (iii)  $2.48 \div 4$
- (iv)  $65.4 \div 6$

- (v) 651.2 ÷ 4
- (vi) 14.49 ÷ 7
- (vii) 3.96 ÷ 4
- (viii)  $0.80 \div 5$

- Find:
  - (i)  $4.8 \div 10$
- (ii)  $52.5 \div 10$
- (iii)  $0.7 \div 10$
- (iv)  $33.1 \div 10$

- (v)  $272.23 \pm 10$  (vi)  $0.56 \pm 10$
- (vii) 3.97 ÷10

- Find:
  - (i) 2.7 ÷ 100
- (ii)  $0.3 \div 100$
- (iii)  $0.78 \div 100$
- (iv) 432.6 ÷ 100 (v) 23.6 ÷100
- (vi) 98.53 ÷ 100

- 4. Find:
  - (i)  $7.9 \div 1000$
- (ii) 26.3 ÷ 1000
- (iii)  $38.53 \div 1000$
- (iv) 128.9 ÷ 1000 (v) 0.5 ÷ 1000
- Find:
  - (i) 7 ÷ 3.5
- (ii)  $36 \div 0.2$
- (iii)  $3.25 \div 0.5$
- (iv)  $30.94 \div 0.7$

- (v)  $0.5 \div 0.25$  (vi)  $7.75 \div 0.25$
- (vii) 76.5 ÷ 0.15
- (viii)  $37.8 \div 1.4$

- (ix)  $2.73 \div 1.3$
- 6. A vehicle covers a distance of 43.2 km in 2.4 litres of petrol. How much distance will it cover in one litre of petrol?