

Exercise – 7.1

A) Find the product.

$$1) 3 \times \frac{1}{3} = \frac{3}{3} = 1 \quad 2) 7 \times \frac{4}{5} = \frac{28}{5}$$

$$3) 9 \times \frac{2}{18} = \frac{18}{18} = 1 \quad 4) 4 \times \frac{1}{2} = \frac{4}{2} = 2$$

B) Solve.

$$1) 3 \times 2\frac{1}{5} = 3 \times \frac{11}{5} = \frac{33}{5} \quad 2) 4 \times 1\frac{3}{7} = 4 \times \frac{10}{7} = \frac{40}{7}$$

$$3) 5 \times 2\frac{3}{5} = 5 \times \frac{13}{5} = \frac{65}{5} = 13 \quad 4) 7 \times 2\frac{1}{4} = 7 \times \frac{9}{4} = \frac{63}{4}$$

C) Multiply.

$$1) \frac{4}{7} \times \frac{1}{3} = \frac{4}{21} \quad 2) \frac{3}{6} \times \frac{1}{2} \times \frac{7}{5} = \frac{21}{60} = \frac{7}{20}$$

$$3) 3\frac{1}{2} \times 2\frac{5}{7} = \frac{4}{72} = \frac{1}{18} \quad 4) \frac{6}{7} \times \frac{2}{3} = \frac{12}{21} = \frac{4}{7}$$

D) Find the product.

$$1) 3\frac{1}{2} \times 2\frac{5}{7} = \frac{7}{2} \times \frac{19}{7} = \frac{19}{2} \quad 2) 2\frac{1}{3} \times 3\frac{1}{4} = \frac{7}{3} \times \frac{13}{4} = \frac{91}{12}$$

$$3) 2\frac{2}{5} \times 1\frac{1}{3} = \frac{12}{5} \times \frac{4}{3} = \frac{48}{15} = \frac{16}{5} \quad 4) 4\frac{5}{9} \times 4\frac{1}{5} = \frac{41}{9} \times \frac{21}{5} = \frac{287}{5}$$

E) Find the value.

$$1) \frac{1}{7} \text{ of } 7 = \frac{1}{7} \times 7 = \frac{7}{7} = 1 \quad 2) \frac{3}{5} \text{ of } 35 = \frac{3}{5} \times 35 = \frac{105}{5} = 21$$

$$3) \frac{1}{2} \text{ of } 4 = \frac{1}{2} \times 4 = \frac{4}{2} = 2 \quad 4) 3\frac{1}{3} \text{ of } 3 = \frac{10}{3} \times 3 = \frac{30}{3} = 10$$

Exercise – 7.2

A) divide.

$$1) \frac{2}{7} \text{ by } 2 = \frac{2}{7} \div 2 = \frac{2}{7} \times \frac{1}{2} = \frac{2}{14} = \frac{1}{7} \quad 2) \frac{4}{9} \text{ by } 8 = \frac{4}{9} \div 8 = \frac{4}{9} \times \frac{1}{8} = \frac{4}{72} = \frac{1}{18}$$

$$3) \frac{5}{6} \text{ by } 15 = \frac{5}{6} \div 15 = \frac{5}{6} \times \frac{1}{15} = \frac{5}{90} = \frac{1}{18} \quad 4) \frac{5}{9} \text{ by } 10 = \frac{5}{9} \div 10 = \frac{5}{9} \times \frac{1}{10} = \frac{5}{90} = \frac{1}{18}$$

$$5) \frac{3}{2} \text{ by } 9 = \frac{3}{2} \div 9 = \frac{3}{2} \times \frac{1}{9} = \frac{3}{18} = \frac{1}{6}$$

$$6) \frac{4}{7} \text{ by } 2 = \frac{4}{7} \div 2 = \frac{4}{7} \times \frac{1}{2} = \frac{4}{14} = \frac{2}{7}$$

B) Solve.

$$1) 11 \div \frac{1}{11} = 11 \times 11 = 121$$

$$2) 7 \div 1\frac{2}{5} = 7 \div \frac{7}{5} = 7 \times \frac{5}{7} = \frac{35}{7} = 5$$

$$3) 6 \div 2\frac{1}{3} = 6 \div \frac{7}{3} = 6 \times \frac{3}{7} = \frac{18}{7}$$

$$4) 42 \div \frac{6}{7} = 42 \times \frac{7}{6} = 49$$

$$5) 4 \div \frac{4}{5} = 4 \times \frac{5}{4} = 5$$

$$6) 99 \div \frac{11}{3} = 99 \times \frac{3}{11} = 27$$

C) Find the value.

$$1) \frac{4}{5} \div \frac{16}{30} = \frac{4}{5} \times \frac{30}{16} = \frac{3}{2}$$

$$2) \frac{3}{7} \div \frac{1}{5} = \frac{3}{7} \times \frac{5}{1} = \frac{15}{7}$$

$$3) \frac{2}{3} \div \frac{3}{7} = \frac{2}{3} \times \frac{7}{3} = \frac{14}{9}$$

$$4) \frac{5}{7} \div \frac{5}{11} = \frac{5}{7} \times \frac{11}{5} = \frac{11}{7}$$

$$5) \frac{3}{7} \div \frac{2}{5} = \frac{3}{7} \times \frac{5}{2} = \frac{15}{14}$$

$$6) \frac{7}{19} \div \frac{14}{21} = \frac{7}{19} \times \frac{21}{14} = \frac{21}{38}$$

D) Solve.

$$1) 2\frac{1}{2} \div 2 = \frac{5}{2} \div 2 = \frac{5}{2} \times \frac{1}{2} = \frac{5}{4}$$

$$2) 8\frac{2}{7} \div 2\frac{1}{6} = \frac{58}{7} \div \frac{13}{6} = \frac{58}{7} \times \frac{6}{13} = \frac{348}{91}$$

$$3) 3\frac{1}{2} \div 5\frac{2}{3} = \frac{7}{2} \div \frac{17}{3} = \frac{7}{2} \times \frac{3}{17} = \frac{21}{34}$$

$$4) 5\frac{1}{5} \div 17 = \frac{26}{5} \div 17 = \frac{26}{5} \times \frac{1}{17} = \frac{26}{85}$$

$$5) 1\frac{2}{7} \div 3\frac{6}{7} = \frac{9}{7} \div \frac{27}{7} = \frac{9}{7} \times \frac{7}{27} = \frac{1}{3}$$

$$6) 2\frac{2}{7} \div 3\frac{6}{7} = \frac{16}{7} \div \frac{27}{7} = \frac{16}{7} \times \frac{7}{27} = \frac{16}{27}$$

Exercise – 7.3

A) simplify.

$$1) \frac{1}{4} \text{ of } 8 \div \frac{4}{5} = \frac{1}{4} \times 8 \div \frac{4}{5} = 2 \div \frac{4}{5} = 2 \times \frac{5}{4} = \frac{5}{2}$$

$$2) \frac{11}{3} - \frac{1}{3} \times \frac{3}{5} \text{ of } 15 = \frac{11}{3} - \frac{1}{3} \times \frac{3}{5} \times 15 = \frac{11}{3} - \frac{1}{3} \times 9 = \frac{11}{3} - 3 = \text{LCM} = 3$$

$$= \frac{11}{3} - \frac{3}{1} = \frac{11}{3} - \frac{3 \times 3}{1 \times 3} = \frac{11}{3} - \frac{9}{3} = \frac{11-9}{3} = \frac{2}{3}$$

$$3) \left(\frac{1}{3} + \frac{1}{3}\right) \div \frac{1}{3} \times \frac{1}{3} - \frac{1}{3} = \frac{2}{3} \div \frac{1}{3} \times \frac{1}{3} - \frac{1}{3} = \frac{2}{3} \times 3 \times \frac{1}{3} - \frac{1}{3} = 2 \times \frac{1}{3} - \frac{1}{3} = \frac{2}{3} - \frac{1}{3} = \frac{1}{3}$$

$$4) \left(\frac{4}{8} \times \frac{1}{4}\right) + \frac{1}{4} + \frac{1}{4} \div \frac{2}{8} = \frac{1}{8} + \frac{1}{4} + \frac{1}{4} \div \frac{2}{8} = \frac{1}{8} + \frac{1}{4} + \frac{1}{4} \times \frac{8}{2} = \frac{1}{8} + \frac{1}{4} + \frac{1}{1}$$

$$= \frac{1}{8} + \frac{1}{4} + \frac{1}{1} \text{ LCM} = 8, \quad \frac{1}{8} + \frac{1 \times 2}{4 \times 2} + \frac{1 \times 8}{1 \times 8} = \frac{1}{8} + \frac{2}{8} + \frac{8}{8} = \frac{1+2+8}{8} = \frac{11}{8}$$

B) solve.

1) $\frac{3}{4}$ m of ribbon was used to make 1 flower . How much ribbon will be used ot make 6 such flower ?

Sol- Ribbon was used to make 1flower = $\frac{3}{4}$ m

Ribbon will be used to make such 6 flowers = $\frac{3}{4}$ m $\times$ 6 = $\frac{3}{4} \times 6 = \frac{9}{2} = 4\frac{1}{2}$ m

Ans- $4\frac{1}{2}$ m ribbon will be used .

2) $\frac{1}{6}$ of the 72 kgs of sugar was used during the festival. How much sugar was used ? How much sugar remained?

Sol- $\frac{1}{2}$ of 72 kgs = ?

$$\frac{1}{2} \times 72 = \frac{72}{2} = 12$$

Ans - Hence, Sugar used = 12

Sugar remained = $72 - 12 = 60$ kgs

3) A group of friends shared 9 sandwiches. If each ate $1\frac{1}{2}$ sandwich, how many children were there?

Sol- Sandwiches = 9

Each child ate = $1\frac{1}{2}$ sandwiches

$$\text{No. of children} = 9 \div 1\frac{1}{2} = 9 \div \frac{3}{2} = 9 \times \frac{2}{3} = 6 \text{ children}$$

Ans- 6 children were there.