

CLASS NOTES

CLASS: VI

DATE: 30 / 09 / 2021

SUBJECT: MATHEMATICS

TOPIC: FRACTION

CH. 7 Fraction

Exercise – 7.1

3. Identify the error, if any.

Solutions:

(i) The shaded portion is not half

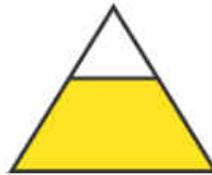
Hence, this is not $1/2$

(ii) Since, the parts are not equal

\therefore Shaded portion is not $1/4$

(iii) Since, the parts are not equal

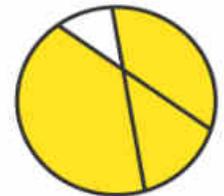
\therefore Shaded portion is not $3/4$



This is $\frac{1}{2}$



This is $\frac{1}{4}$



This is $\frac{3}{4}$

5. What fraction of an hour is 40 minutes?

Solutions: There are 60 minutes in 1 hour

\therefore 1 hour = 60 minutes

Hence, required Fraction = $\frac{40}{60} = \frac{2}{3}$

6. Arya, Abhimanyu, and Vivek shared lunch. Arya has brought two sandwiches, one made of vegetable and one of jam. The other two boys forgot to bring their lunch. Arya agreed to share his sandwiches so that each person will have an equal share of each sandwich.

(a) How can Arya divide his sandwiches so that each person has an equal share?

Solution: Arya has divided the sandwich into 3 equal parts. So each person will get one part.

(b) What part of a sandwich will each boy receive?

Solution: Each boy receive $\frac{1}{3}$ part

\therefore Required Fraction is $\frac{1}{3}$

7. Kanchan dyes dresses. She had to dye 30 dresses. She has so far finished 20 dresses. What fraction of dresses has she finished?

Solutions: Total number of dresses Kanchan has to dye = 30 dresses

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Number of dresses she has finished = 20 dresses

$$\therefore \text{Required Fraction} = \frac{20}{30} = \frac{2}{3}$$

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

Solutions: Natural numbers from 2 to 12 are 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

Total number of natural numbers given = 11

Number of prime numbers = 5 [2,3,5,7,11]

$$\therefore \text{Required Fraction} = \frac{5}{11}$$

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

Solutions: Natural numbers from 102 to 113 are 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113

Total number of natural numbers given = 12

Number of prime numbers = 4 [103, 107, 109, 113]

$$\therefore \text{Required Fraction} = \frac{4}{12} = \frac{1}{3}$$

11. Kristin received a CD player for her birthday. She bought 3 CDs and received 5 others as gifts. What fraction of her total CDs did she buy and what fraction did she receive as gifts?

Solutions: Number of CDs Kristin bought from the market = 3

Number of CDs received as gifts = 5

Total number of CDs Kristin have = 3 + 5 = 8

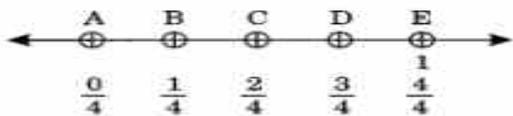
$$\therefore \text{Fraction of CD she bought} = \frac{3}{8} \quad \therefore \text{Fraction of CDs received as gifts} = \frac{5}{8}$$

Exercise – 7.2

Q1. Draw number lines and locate the points on them:

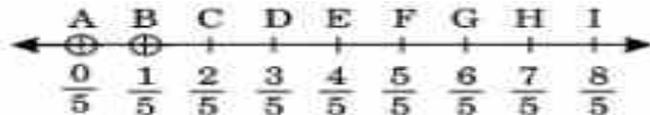
(a) $\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{4}{4}$

Solution:



(c) $\frac{2}{5}, \frac{3}{5}, \frac{8}{5}, \frac{4}{5}$

Solution:



2. Express the following as mixed fractions:

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Solution:

$$(a) \frac{20}{3}$$

We have,

$$\begin{array}{r} 3 \overline{)20} \text{ (6)} \\ -18 \\ \hline 2 \end{array}$$

$$\therefore \frac{20}{3} = 6\frac{2}{3}$$

$$(c) \frac{17}{7}$$

We have,

$$\begin{array}{r} 7 \overline{)17} \text{ (2)} \\ -14 \\ \hline 3 \end{array}$$

$$\therefore \frac{17}{7} = 2\frac{3}{7}$$

$$(d) \frac{28}{5}$$

We have,

$$\begin{array}{r} 5 \overline{)28} \text{ (5)} \\ -25 \\ \hline 3 \end{array}$$

$$\therefore \frac{28}{5} = 5\frac{3}{5}$$

$$(f) \frac{35}{9}$$

We have,

$$\begin{array}{r} 9 \overline{)35} \text{ (3)} \\ -27 \\ \hline 8 \end{array}$$

$$\therefore \frac{35}{9} = 3\frac{8}{9}$$

3 Express the following as improper fractions:

Solution:

$$(a) 7\frac{3}{4} = \frac{7 \times 4 + 3}{4} = \frac{31}{4} \quad \therefore 7\frac{3}{4} = \frac{31}{4}$$

$$(b) 5\frac{6}{7} = \frac{5 \times 7 + 6}{7} = \frac{41}{7} \quad \therefore 5\frac{6}{7} = \frac{41}{7}$$

$$(e) 9\frac{3}{7} = \frac{9 \times 7 + 3}{7} = \frac{66}{7} \quad \therefore 9\frac{3}{7} = \frac{66}{7}$$

$$(f) 8\frac{4}{9} = \frac{8 \times 9 + 4}{9} = \frac{76}{9} \quad \therefore 8\frac{4}{9} = \frac{76}{9}$$

Home Work

Ex. 7.1 Q. 1,2,4,10

Ex.-7.2 Q.1 - b, Q.2 - b, e, Q.3- c, d

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