

CHAPTER -4

Ex-4.1

1. a set b. set c. not a set d. set e. not a set.

Ex-4.2

1. a. $X = \{11, 12, 13, 14, 15, 16, 17, 18, 19\}$ b. $Y = \{-5, 0, 5\}$ c. $B = \{\text{April, June, Sep, Nov}\}$

2. a. set of all first four months in a year.

b. $C = \{x | x \text{ is a prime numbers } 10 < x < 20\}$

- c. Set of numbers which is neither prime nor composite.

3. a. $n(G) = 6$ b. $n(E) = 0$

Ex-4.3

1. a. not equal and not equivalent

- b. Equal and equivalent

2. a. empty b. singleton c. neither empty nor singleton.

3. a. $\{1, 3, 5, 15\}$ – finite b. infinite

For curious mind:

1. infinite 2. finite 3. Infinite 4. Finite 5. null 6. Finite 7. Null 8. Infinite
9. Finite

Match

- 1) A well-defined collection of distinct objects.
- 2) A set whose members can be counted
- 3) A set with members that cannot be counted
- 4) Sets that have an equal number of members.
- 5) A set whose elements are all part of the elements of a bigger set.
- 6) If a set has no elements
- 7) A set with identical members.
- 8) Sets that have no members in common.
- 9) The objects of a set.

CHAPTER -5

Ex-5.1 TO 5.9

1. $\frac{2}{4}, \frac{2}{5}, \frac{1}{3}, \frac{1}{4}, \frac{2}{10}, \frac{3}{8}, \frac{1}{2}, \frac{4}{5}$

2. a. $\frac{2}{9} < \frac{7}{6} < \frac{4}{3}$ b. $\frac{3}{14} < \frac{4}{7} < \frac{8}{7}$

3. a. $\frac{19}{9}$ b. $\frac{5}{28}$ c. 15 d. 6

4. $\frac{79}{20}$ 5. $\frac{33}{8}$ 6. 219

Ex- 5.10 to 5.12

1. $5000+600+50+3+\frac{7}{10} + \frac{6}{100} + \frac{8}{1000}$

2. a. $5.005 < 55.008 < 56.008 < 505$

b. $35 < 35.56 < 63.45 < 465.7$

3. a. 0.345 b. 0.08 c. 5.75 d. 1.625

4. a. 326.780 b. 866.196 c. 809.894 d. 244.35 e. 218.983

For curious mind

1. $\frac{3}{4}$ 2. $\frac{5}{8}$ 3. $\frac{9}{10}$ 4. $\frac{3}{5}$ 5. $\frac{5}{9}$ 6. $\frac{5}{7}$ 7. $\frac{9}{24}$ 8. $\frac{3}{10}$

1. $\frac{9}{100}$ 2. $\frac{24}{100}$ 3. $\frac{82}{100}$ 4. $\frac{7}{100}$ 5. $\frac{92}{100}$ 6. $\frac{2}{100}$

CHAPTER - 6

Ex- 6.1

1. 0 2. 8 3. 1 4. 12 5. 6 6. 8 7. 6 8. 3

Ex-6.2

1. a. 1,3,5,9,14,35,70 b. 1,2,5,7,10,14,35,70

c. 1,2,3,5,6,10,15,25,30,50,75,150 d. 1,3,5,9,15,27,45,135

2. a. 13,26,39,52,65,78,91,104,117,130

b. 15,30,45,60,75,90,105,120,135,150

c. 20,40,60,80,100,120,140,160,180,200

d. 17,34,51,68,85,102,119,136,153,170

Ex- 6.3

1. a. 2,4,6,8,9,10,12,14,15,16,18,20

b. 30,32,34,35,36,38,39,40,42,44,45

c.90,91,92,93,94,95,96,98,99

2. a. 7,11,13,17,19

b. 37,41,43,47

c. 71,73,79,83,89,97

Ex- 6.4

numbers	2	3	4	5	6	8	9	10	11
9328	yes	no	yes	no	no	yes	no	no	yes
4050	yes	yes	no	yes	yes	no	yes	yes	no
9864	yes	yes	yes	no	yes	yes	yes	no	no
12396	yes	yes	yes	no	yes	no	no	no	no
15671	no	no	no	no	no	no	no	no	no

1. a. $2 \times 2 \times 3 \times 7 \times 2 \times 5$

b. 5×91

c. $3 \times 7 \times 2 \times 5$

Ex -6.6 to 6.8

1. a.12

b. 12

2. a. 324

b. 200

3. 30

4. 24

For curious mind

1. 42

2. 14

3. 20

4. 30

5.90

6. 21

7. 24

8.30

9.42

10.33

11.21

12.50

13.48

14.49

Chapter -7

Ex – 7.1

1. a. 37:47

b. 3:10

c. 85:144

2. a. 1:2

b. 2:1

c. 4:1

3. $11:15 > 7:10$

b. $8:10 < 9:4$

4. a.60

b. $\frac{8}{3}$

5. a. 5

b. 630

6.equivalent

7. 16

For curious mind

1. 8 2. 25 3. 11 4. 2 5. 6

Simplification;

1. $\frac{5}{6}$ 2. $\frac{7}{9}$ 3. $\frac{6}{7}$ 4. $\frac{10}{11}$ 5. $\frac{4}{5}$ 6. $\frac{4}{9}$ 7. $\frac{3}{8}$
8. $\frac{1}{6}$ 9. $\frac{7}{9}$ 10. $\frac{1}{7}$

Word problem:

1. 2 2. 24 3. 30 4. 6 5. 225 6. 16 7. 24

CHAPTER -8

Ex- 8.1 and 8.2

1. 14.5

2. 120

3. 1300

4. 200 a. 15% b. 16% c. 33.33%

5. a. $\frac{6}{25}$ b. $\frac{3}{20}$ c. $\frac{1}{2}$

For curious mind

1. 280 2. 130 3. 80 4. 56 5. 220

Chapter -9

Ex- 9.1

1. 20 2. 80% 3. 4 4. 62km/hr 5. 2km/hr

For curious mind

1. 18km 2. 120 km 3. 20min 4. 15 km/hr 5. 45 km/hr
6. 7 km 7. 12 km 8. 40km/hr