

# Answers



## Ch-1 Knowing the Numbers

### Exercise 1.1

1. (a) 1 (b) Infinity (c) 100 (d) 999      2. (a) 70 (b) 787 (c) 1253 (d) 6790  
3. (a) 39 (b) 250 (c) 4999 (d) 39282      4. (a) 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48  
(b) 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128  
(c) 5213, 5214, 5215, 5216, 5217, 5218, 5219, 5220      (d) 8414, 8415, 8416, 8417, 8418, 8419, 8420, 8421, 8422, 8423, 8424  
5. 23, 24, 25, 26      6. (a) 1507, 948, 288, 126 (b) 2403, 1515, 262, 175 (c) 8412, 476, 285, 91 (d) 5628, 3784, 1789, 976  
7. (a) 178, 864, 1150, 6965 (b) 700, 712, 860, 890 (c) 69, 88, 115, 162 (d) 1989, 2003, 2006, 2018  
8. (a) 23567 (b) 13578 (c) 12346 (d) 20479      9. (a) 98751 (b) 74320 (c) 96542 (d) 97643  
10. 368, 386, 638, 836      11. 20 times

### Exercise 1.2

1. (a) Place value = 60000, Face value = 6 (b) Place value = 800, Face value = 8 (c) Place value = 500, Face value = 5  
(d) Place value = 90000, Face value = 9 (e) Place value = 600, Face value = 6 (f) Place value = 70000, Face value = 7  
(g) Place value = 5000, Face value = 5 (h) Place value = 2000, Face value = 2  
2. (a) Four lakh eighty six thousand nine hundred twenty one. (b) Five lakh eighty nine thousand seven hundred eight.  
(c) Seven lakh sixty seven thousand eight hundred ninety one. (d) Seven lakh eighty six thousand five hundred twenty nine.  
(e) Seven lakh ninety five thousand six hundred thirty eight. (f) Eight lakh twenty four thousand nine hundred five.  
(g) Three lakh fifty eight thousand seven hundred sixty two. (h) Nine lakh seventy six thousand four hundred twenty eight.  
3. (a) Four hundred eighty five thousand and five hundred sixty seven.  
(b) Four hundred eighty six thousand and five hundred twenty eight.  
(c) Five million, eight hundred ninety two thousand and sixty eight.  
(d) Six million, four hundred twenty five thousand and eight hundred ninety five.  
(e) Six million, seven hundred fifty six thousand and two hundred forty three.  
(f) Six million, two hundred fifty one thousand and three hundred fifty two.  
(g) Eight million, nine hundred forty eight thousand and eight hundred forty two.  
(h) Three million, four hundred sixty two thousand and five hundred forty eight.  
4. (a) 60, 57, 521 (b) 82, 23, 646 (c) 7, 05, 22, 396 (d) 65, 427, 378 (e) 87, 638, 628  
(f) 60, 936, 705 (g) 2, 008, 938, 472      5. (a) 10 (b) 1 (c) 100 (d) 100

### Exercise 1.3

1. (a) > (b) > (c) = (d) = (e) < (f) >  
2. (a) 35507, 36105, 38170, 72791 (b) 1045621, 7384015, 32465902, 43565103, 98004865  
(c) 1090405, 1245203, 2045629, 8420659, 74305709 (d) 15112011, 12450311, 40506080, 60050102, 70051121  
(e) 3041029, 4352629, 70080405, 83400291, 983400974  
3. (a) 75200, 6710, 5990, 5150 (b) 834280095, 284660011, 7642095, 2709472, 1004691  
(c) 708059162, 8706512, 8050672, 5426179, 3326594 (d) 5142125, 5040550, 4652112, 4495821, 4121127  
(e) 98370521, 83462050, 73226459, 60402032, 54005906

### Exercise 1.4

1. 40, 30, 60, 40, 70, 50, 70, 90, 230, 530, 550, 1950      2. 100, 100, 200, 200, 200, 200, 400, 400, 300, 700, 800  
3. 4000, 3000, 4000, 5000, 4000, 4000, 9000, 7000, 10000  
4. (a)  $210 + 620 = 830$  (b)  $7140 + 680 = 7820$  (c)  $440 + 540 = 980$  (d)  $540 + 750 = 1290$   
5. (a)  $2400 + 3800 = 6200$  (b)  $3900 + 4400 = 8300$  (c)  $4700 + 5400 = 10100$  (d)  $5800 + 6800 = 12600$   
6. (a)  $45000 + 37000 = 82000$  (b)  $28000 + 4000 = 32000$  (c)  $3000 + 12000 = 15000$  (d)  $57000 + 38000 = 95000$



### Exercise 1.5

- (a) LXII (b) XCIX (c) CXVII (d) DI (e) CDXL (f) DXXIV (g) DCCXL (h) DCCCXII  
(i) CMXII (j) MCL
- (a) 210 (b) 93 (c) 1051 (d) 142 (e) 259 (f) 430 (g) 77 (h) 1900 (i) 170 (j) 136
- (a) < (b) > (c) < (d) < (e) < (f) = (g) < (h) =

### Revision Exercise

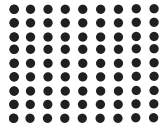
- (a) (ii) (b) (iii) (c) (ii) (d) (ii) (e) (ii) (f) (ii) (g) (i)
- (a) 410, 519, 712, 918, 1011 (b) 8009, 8090, 9008, 9080, 9280 (c) 169, 181, 315, 692, 715 (d) 4008, 4028, 4598, 4800, 4828
- (a) 978, 467, 359, 298, 272 (b) 999, 991, 979, 969, 919 (c) 8175, 7891, 4258, 3981, 1985 (d) 7968, 7890, 7889, 7668, 7650
- (a) Two hundred ninety five thousand and six hundred seventy eight.  
(b) Four hundred eighty seven thousand and six hundred twenty one.  
(c) Four hundred ten thousand and one hundred thirty five.  
(d) Six million, four hundred twenty five thousand and eight hundred ninety five.  
(e) Seventeen million, five hundred sixty three thousand and two hundred eighty nine.  
(f) Sixty eight million, six hundred fifteen thousand and one.
- (a) Ten lakh eighty three thousand seven hundred fifty six.  
(b) Eighty lakh eighty one thousand nine hundred ninety nine.  
(c) Nine crore eighty one lakh eighty eight thousand three hundred five.  
(d) Seven crore fifty six lakh eighteen thousand eight hundred thirty.  
(e) Twenty five lakh ninety three thousand two hundred forty seven.  
(f) Seven crore eighty one lakh ninety two thousand three hundred forty eight.
- (a) 4000 (b) 5000 (c) 9000 (d) 5000 (e) 6000 (f) 8000 (g) 5000 (h) 9000
- (a) XLIX (b) LXII (c) DCCLVI (d) CCXXXV (e) DXLVIII (f) CMX (g) MCLXVIII (h) MD  
(i) CMXVIII (j) MCCLXI (k) MCDXV (l) MCCCXII
- (a) < (b) > (c) < (d) =  
(e) < (f) > (g) > (h) > (i) = (j) > (k) >

### Ch-2 Whole Numbers

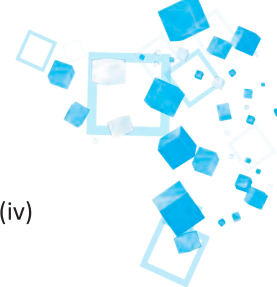
#### Exercise 2.1

- (a) 188 (b) 43 (c) 1 (d) 0 (e) 0 (f) 2
- (a) 169 (b) 810 (c) 5190 (d) 1100
- (a) 289848 (b) 171500 (c) 246000 (d) 1455624
- (a) 10498 (b) 6541200 (c) 155800 (d) 14406
- (a) 57630 (b) 48807 (c) 63551 (d) 717395
- 36200, distributive property of multiple
- 21 seats
- ₹ 819
- 1838 people
- ₹ 4200

#### Exercise 2.2

- Rectangular number = 15, 16, 18, 20, 21, 22, 24, 26, 27, 28, 30 ; Square number = 16, 25 ;  
Triangular number = 15, 21, 28
- $2 \times 19$
- |    |      |                  |                  |                   |                   |                   |
|----|------|------------------|------------------|-------------------|-------------------|-------------------|
| •• | •••• | •••              | ••••             | •••••             | ••••••            | •••••••           |
| 2  | 4    | $6 = 2 \times 3$ | $8 = 2 \times 4$ | $10 = 2 \times 5$ | $12 = 2 \times 6$ | $14 = 2 \times 7$ |
- |    |   |    |               |
|----|---|----|---------------|
| 4. |  | 5. | 4, 25, 36, 64 |
|    | $81 = 9 \times 9$   |    |               |
- 15, 35, 125, 188
- $6 \times 6 + 4 = 40$     $6 \times 7 + 6 = 48$     $6 \times 8 + 8 = 56$     $6 \times 9 + 10 = 64$     $6 \times 10 + 12 = 72$





### Revision Exercise

- (a) (iii) (b) (ii) (c) (iii) (d) (ii) (e) (iv) (f) (ii) (g) (ii) (h) (iv) (i) (i) (j) (iv)
- (a) 0, closure property for addition (b) 18, associative property of multiplication (c) 0, additive identity
- (a) 181425 (b) 14950 (c) 58305 (d) (a) multiplicative identity  
(b) distributive property of multiplication over addition (c) commutative property of multiplication
- 420 chairs 6. 2250 people 7. 980 km 8. 56 sweets 9. 30 drums 10. Twinkle

### Ch-3 Playing with Numbers

#### Exercise 3.1

- (a) 16 (b) 30 (c) 1 (d) 5 (e) 32 (f) 132 (g) 4 (h) 36

#### Exercise 3.2

- (c) (b) 2. (a) (c) 3. (b)(c) 4. (b) 5. (b) (c) 6. (a) (b) (c) 7. (a) (b) (c)
- 507, 546, 564, 579, 588, 591, 597, 609, 639, 645
- 2 and 4 10. A number is divisible by 18, if the sum of digits is divisible by 2 and 9.

#### Exercise 3.3

- (a) 1, 2, 4, 7, 8, 14, 28, 56 (b) 1, 2, 3, 4, 6, 8, 12, 16, 24, 32, 48, 96 (c) 1, 2, 3, 6, 13, 26, 39, 78 (d) 1, 2, 4, 11, 22, 44  
(e) 1, 2, 3, 6, 11, 22, 33, 66 (f) 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90
- (a) 6, 12, 18, 24, 30 (b) 7, 14, 21, 28, 35 (c) 9, 18, 27, 36, 45  
(d) 15, 30, 45, 60, 75 (e) 23, 46, 69, 92, 115 (f) 37, 74, 111, 148, 185
- (a)  $2 \times 2 \times 2 \times 2 \times 5$  (b)  $3 \times 43$  (c)  $2 \times 2 \times 2 \times 2 \times 3 \times 3$  (d)  $5 \times 29$  (e)  $2 \times 2 \times 2 \times 2 \times 2 \times 2$  (f)  $2 \times 2 \times 59$

#### Exercise 3.4

- (b) (d) (f)

	Even	Odd
a.	82, 294	5
b.	260	3, 45
c.	300	3
d.	1986	231
e.	18, 30	27
f.	16	29

- (b) is twin prime
- (6, 11), (7, 10), (8, 13), (9, 16) and (5, 14)
- $5 + 13 + 37 = 55$
- (a) 13, 23 (b) 23, 43 (c) 13, 43

#### Exercise 3.5

- (a) Base = 7, Power = 6 (b) Base = 4, Power = 7 (c) Base = 12, Power = 6 (d) Base = 5, Power = 8  
(e) Base = 6, Power = 5 (f) Base = 3, Power = 0
- (a)  $10^7$  (b)  $10^5$  (c)  $5^2 \times 10^3$

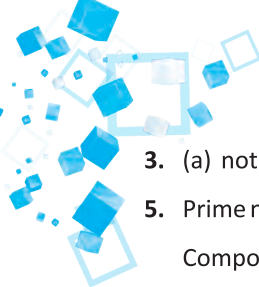
#### Exercise 3.6

- (a) 14 (b) 17 (c) 1 (d) 2 (e) 1 (f) 1
- (a) 240 (b) 3451 (c) 15640 (d) 510 (e) 1056 (f) 7770
- HCF = 9, LCM = 18900 4. 17 5. 5040

### Revision Exercise

- (a) (i) (b) (iii) (c) (ii) (d) (iii) (e) (i) (f) (i) (g) (i) (h) (iii) (i) (i) (j) (i)
- (a) 43 (b) 10 (c) 8 (d) 15





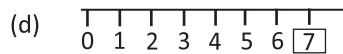
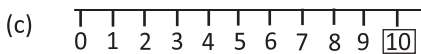
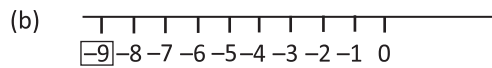
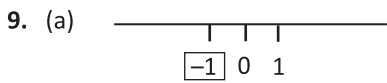
3. (a) not (b) not (c) not (d) yes (e) yes (f) not 4. 1, 2, 41, 82  
 5. Prime numbers = 2, 3, 5, 7, 11, 13, 17, 19, 23, 29 6. (3, 5); (5, 7); (11, 13)  
 Composite numbers = 4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28

7. (a) 2 (b) 15 (c) 1 8.  9. HCF = 3 10. L.C.M = 180

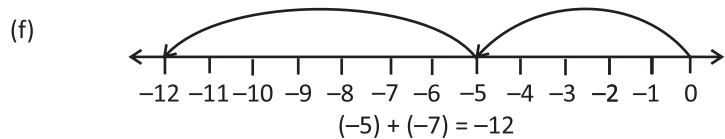
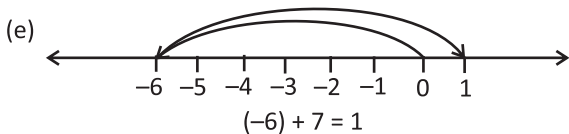
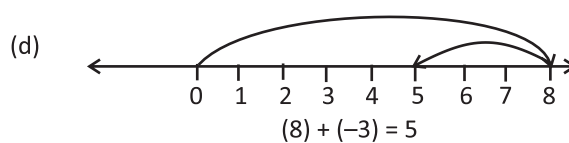
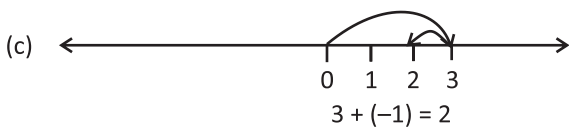
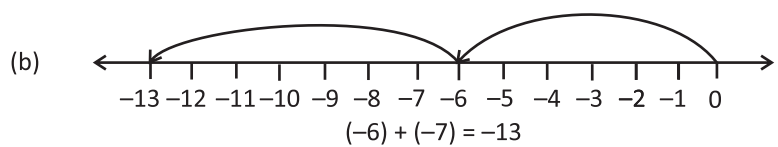
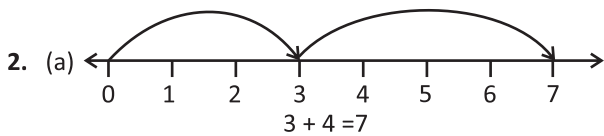
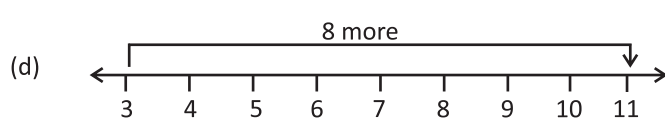
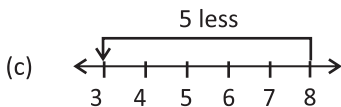
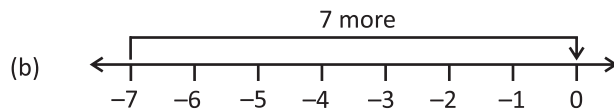
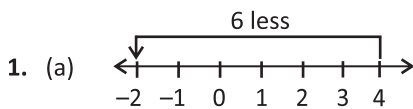
**Ch-4 Negative Numbers and Integers**

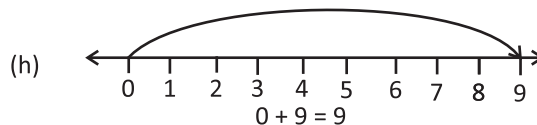
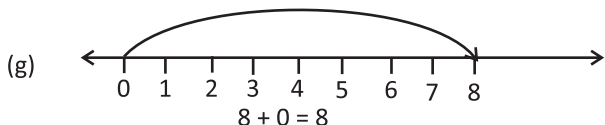
**Exercise 4.1**

1. (a) > (b) = (c) < (d) <  
 (e) > (f) >  
 2. (a) -140, -25, -12, +77, 130  
 (b) -110, -1, 0, +9, 11  
 (c) -51, -7, 0, 8, 10 (d) -40, -10, 0, +20, +50 (e) -88, -87, +10, +67  
 (f) -90, -70, -11, +50, 110 (g) -76, 55, 83, 99  
 3. (a) 701, 77, 0, -7, -107 (b) 10, 9, 0, -1, -10 (c) 78, 55, 0, -55, -75  
 (d) 110, +50, -55, -107 (e) 809, 607, -706, -708, -709  
 4. (a) 5 (b) 0 (c) -15 (d) +10  
 5. (a) -2, -1, 0, 1, 2, 3, 4 (b) 1, 2, 3, 4, 5 (c) -2, -1, 0, 1, 2  
 (d) 0, 1, 2, 3, 4, 5, 6 (e) -4, -5, -6, -7, -8 (f) -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7  
 6. (a) 11, 12, 13 (b) -1, -2, -3 (c) 1, 2, 3  
 7. (a) -19 (b) 0 (c) 1 (d) 1 (e) 13 (f) 8  
 8. (a) 3 (b) 11 (c) 0 (d) 1 (e) 4 (f) 6



**Exercise 4.2**





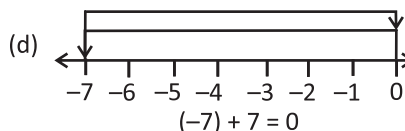
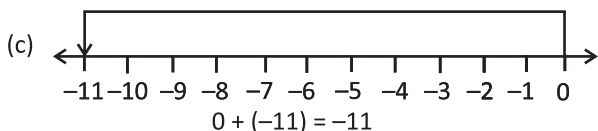
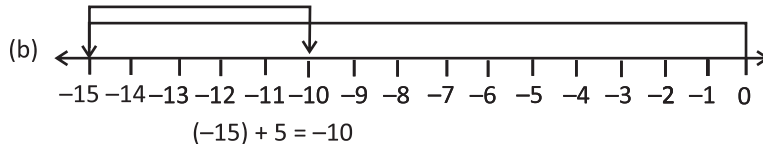
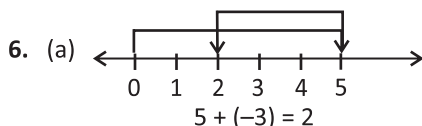
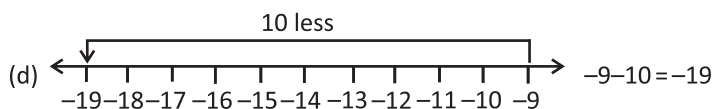
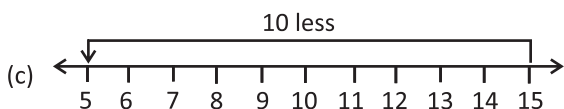
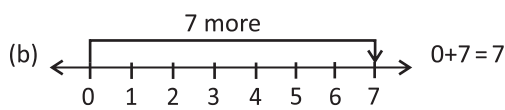
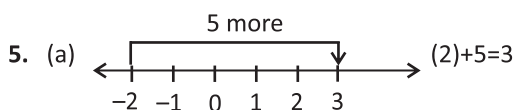
3. (a) 4 (b) 415 (c) -9 (d) 331 (e) 0 (f) -295 (g) -1521 (h) -1450 (i) -325  
 4. (a) -71 (b) +52 (c) +101 (d) -429 (e) +6127 (f) -5120  
 5. (a) 330 (b) -649 (c) 0 (d) 781 (e) 860

**Exercise 4.3**

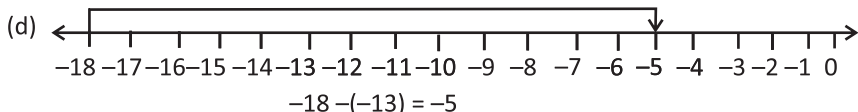
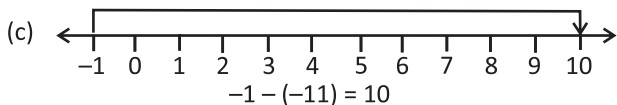
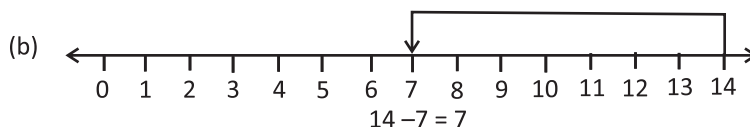
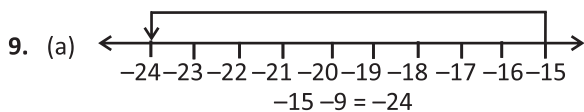
1. (a) 7 (b) -3 (c) 32 (d) 1 (e) 0 (f) 4 (g) 1 (h) 19 (i) 2  
 2. (a) 26 (b) 155 (c) 5 (d) 0 (e) -6 (f) 195  
 3. (a) > (b) > (c) > (d) < (e) <  
 4. (a) -999 (b) -1 (c) 31000 (d) -1001 (e) 108 (f) -910 5. 14  
 6. (a) ✓ (b) ✗ (c) ✓ (d) ✓ (e) ✓

**Revision Exercise**

1. (a) (i) (b) (i) (c) (ii) (d) (iii) (e) (iii) (f) (iii) (g) (i)  
 2. (a) -9, -8, -1, 0, 9, 10 (b) -199, -105, -88, +77, +175 (c) -199, -100, -10, 99, +101 (d) -88, -60, 50, +75, +77  
 3. (a) -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6 (b) -8, -7, -6, -5, -4, -3, -2 (c) 1, 2, 3, 4, 5, 6, 7, 8, 9 (d) -8, -7, -6, -5, -4, -3, -2, -1  
 4. (a) -9 (b) -50 (c) -1 (d) -99



7. (a) 0 (b) -10 (c) 11 (d) 100 (e) -99  
 8. (a) 55 (b) -127 (c) 4 (d) 4

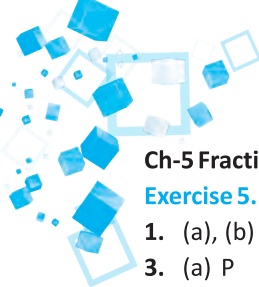


10. (a)  
 11. (a) -101 (b) 98 (c) -2 (d) -11

**Formative Assessment-I**

- A. 1. (ii) 2. (ii) 3. (iv) 4. (iv) 5. (ii) 6. (i) 7. (iv) 8. (ii) 9. (iv) 10. (i)  
 B. 1. 7 (I, V, X, L, C, D, M) 2. unit distance 3. number itself 4. Divisor 5. 1 (one).  
 C. 1. ✗ 2. ✓ 3. ✓ 4. ✗ 5. ✓ 6. ✓ 7. ✗ 8. ✗ 9. ✓ 10. ✗

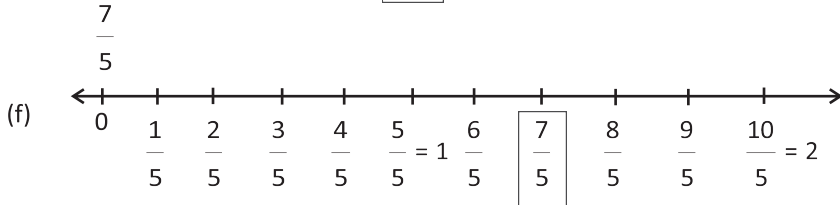
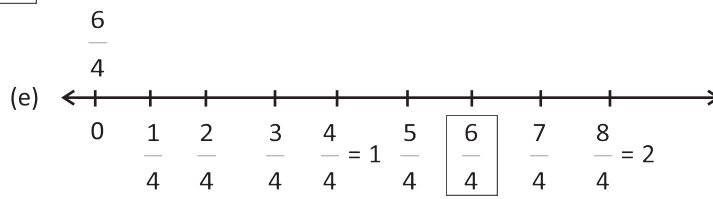
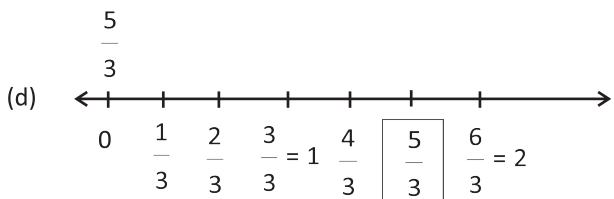
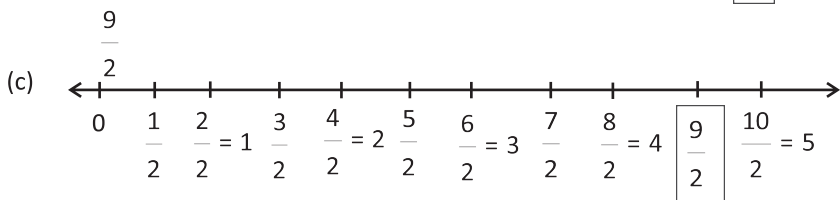
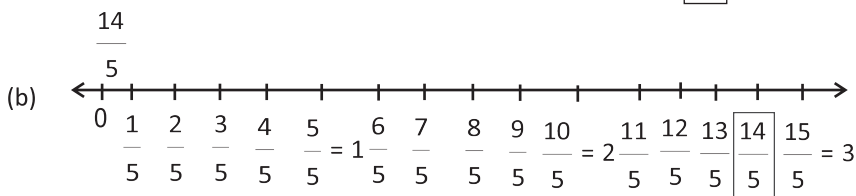
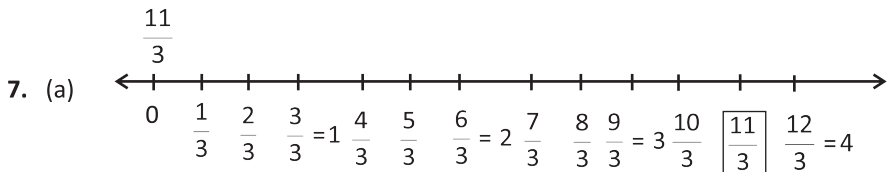




**Ch-5 Fraction**

**Exercise 5.1**

1. (a), (b) and (d)      2. (a) U      (b) L      (c) U      (d) L      (e) L      (f) U  
 3. (a) P      (b) P      (c) P      (d) I      (e) I      (f) I  
 4. (a) 6      (b) 6      (c) 4      (d) 20      (e) 56      (f) 9  
 5. (a)  $1\frac{2}{7}$       (b)  $4\frac{3}{4}$       (c)  $5\frac{2}{5}$       (d)  $8\frac{14}{17}$       (e)  $2\frac{4}{7}$       (f)  $2\frac{1}{5}$   
 6. (a)  $\frac{25}{11}$       (b)  $\frac{36}{7}$       (c)  $\frac{23}{5}$       (d)  $\frac{76}{9}$       (e)  $\frac{66}{7}$       (f)  $\frac{10}{3}$



8. (b), (c), (e) and (f)

9. (a)  $\frac{2}{9}$       (b)  $\frac{8}{9}$       (c)  $\frac{3}{4}$       (d)  $\frac{1}{3}$       (e)  $\frac{5}{7}$       (f)  $\frac{3}{4}$

**Exercise 5.2**

1. (a) 2      (b)  $\frac{2}{3}$       (c)  $9\frac{3}{5}$       (d)  $\frac{5}{9}$       (e)  $\frac{6}{7}$       (f)  $\frac{3}{4}$       (g)  $1\frac{3}{8}$       (h)  $8\frac{13}{15}$   
 (i)  $5\frac{7}{18}$       (j)  $8\frac{65}{84}$       (k)  $1\frac{83}{180}$   
 2. (a)  $\frac{-5}{9}$       (b)  $\frac{1}{2}$       (c)  $1\frac{7}{8}$       (d)  $2\frac{1}{3}$       (e)  $\frac{3}{5}$       (f)  $\frac{1}{12}$       (g)  $\frac{5}{6}$       (h)  $\frac{9}{20}$   
 (i)  $6\frac{7}{12}$       (j)  $1\frac{9}{20}$       (k)  $\frac{4}{35}$



3. (a)  $\frac{3}{5}$  (b)  $\frac{13}{21}$  (c)  $7\frac{4}{5}$  (d)  $8\frac{7}{8}$  (e) 13 (f)  $8\frac{3}{8}$  (g)  $\frac{2}{21}$  (h) 8

4. Ramesh,  $25\frac{3}{5}$  minutes 5.  $1\frac{3}{20}$  m 6.  $\frac{1}{2}$  7.  $3\frac{13}{66}$  km

### Exercise 5.3

1. (a)  $\frac{35}{81}$  (b)  $\frac{3}{8}$  (c)  $\frac{60}{77}$  (d)  $\frac{3}{17}$  (e) 1 (f)  $3\frac{15}{16}$  (g)  $24\frac{3}{7}$  (h)  $58\frac{58}{63}$

2. (a) Improper (b) Improper (c) Proper (d) Improper (e) Proper (f) Proper

3. (a) 1 (b)  $\frac{3}{40}$  (c)  $1\frac{9}{10}$  (d)  $\frac{3}{4}$  (e)  $\frac{55}{91}$  (f)  $1\frac{5}{6}$  (g)  $\frac{6}{11}$  (h)  $\frac{3}{20}$  (i)  $\frac{5}{49}$  (j)  $\frac{1}{20}$

### Exercise 5.4

1. (a)  $\frac{13}{15}$  (b)  $\frac{10}{21}$  (c) 2 (d)  $\frac{1}{3}$  (e)  $\frac{7}{8}$

2.  $4\frac{1}{4}$  kg 3. Pradeep 4. ₹ 630 5.  $3\frac{7}{8}$  6.  $\frac{175}{2}$  km 7.  $2\frac{3}{4}$  m 8. ₹  $32\frac{1}{2}$

### Revision Exercise

1. (a) (iv) (b) (iii) (c) (iv) (d) (ii) (e) (ii) (f) (iii) (g) (iii) (h) (iii)

2. (a)  $\frac{6}{16}, \frac{9}{24}, \frac{12}{32}, \frac{15}{40}$  (b)  $\frac{12}{14}, \frac{18}{21}, \frac{24}{28}, \frac{30}{35}$  (c)  $\frac{22}{26}, \frac{33}{39}, \frac{44}{52}, \frac{55}{65}$  (d)  $\frac{30}{34}, \frac{45}{51}, \frac{60}{68}, \frac{75}{85}$

(e)  $\frac{4}{14}, \frac{6}{21}, \frac{8}{28}, \frac{10}{35}$  (f)  $\frac{10}{16}, \frac{15}{24}, \frac{20}{32}, \frac{25}{40}$  (g)  $\frac{14}{26}, \frac{21}{39}, \frac{28}{52}, \frac{35}{65}$  (h)  $\frac{10}{14}, \frac{15}{21}, \frac{20}{28}, \frac{25}{35}$

3. (a)  $\frac{31}{40}$  (b)  $\frac{13}{30}$  (c)  $1\frac{5}{12}$  (d)  $1\frac{2}{3}$  (e)  $1\frac{128}{455}$  (f)  $\frac{286}{323}$

4. (a)  $\frac{2}{7}$  (b) 9 (c)  $\frac{3}{10}$  (d)  $\frac{31}{63}$  (e)  $2\frac{1}{3}$  (f)  $\frac{1}{6}$  5.  $3\frac{13}{20}$  6.  $9\frac{1}{3}$  m 7.  $2\frac{5}{6}$

### Ch-6 Decimal

#### Exercise 6.1

1. (a) < (b) > (c) > (d) = (e) < (f) = (g) > (h) >

2. (a) 0.777, 7.77, 77.7, 7770 (b) 0.07, 0.17, 7.007, 7.117 (c) 2.0, 2.01, 2.1, 2.25 (d) 2.657, 26.5, 26.54, 26.57 (e) 7.19, 7.39, 17.309, 17.390 (f) 1.434, 1.617, 1.712, 1.999

3. (a) 0.56, 0.31, 0.010, 0.098 (b) 34.2, 34.1, 34.02, 34.01 (c) 1111, 111.1, 11.11, 1.111 (d) 0.67, 0.536, 0.4, 0.112 (e) 89.2, 89.1, 89.02, 89.01 (f) 211.2, 21.12, 2.112, 0.221

4. (a) 2.300, 4.340, 5.212 (b) 0.200, 30.270, 30.275 (c) 25.500, 25.550, 0.255 (d) 9.050, 2.500, 2.533 (e) 456.300, 4.560, 4.356 (f) 1.100, 1.110, 1.111

5. (a)  $\frac{33}{8}$  (b)  $\frac{1111}{5}$  (c)  $\frac{1}{4}$  (d)  $\frac{29}{100}$  (e)  $\frac{87003}{1000}$  (f)  $\frac{17}{10}$

(g)  $\frac{27}{100}$  (h)  $\frac{4723}{100}$  (i)  $\frac{2111}{1000}$  (j)  $\frac{117}{500}$

6. (a) 0.23 (b) 23.5 (c) 2.469 (d) 0.5 (e) 22.11 (f) 13.1 (g) 3.9 (h) 2.008 (i) 0.45 (j) 0.89

7. (a)  $\frac{768}{1000} = 0.768$  (b)  $\frac{64}{100} = 0.64$  (c)  $\frac{225}{100} = 2.25$  (d)  $\frac{86}{100} = 0.86$  (e)  $\frac{8}{10} = 0.8$  (f)  $\frac{418}{1000} = 0.418$

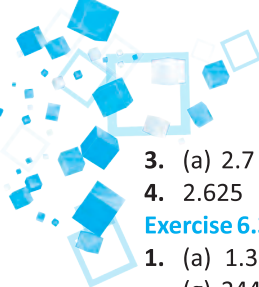
(g)  $\frac{72}{1000} = 0.072$  (h)  $\frac{1300}{1000} = 1.300$  (i)  $\frac{70}{100} = 0.7$  (j)  $\frac{26}{100} = 0.26$

#### Exercise 6.2

1. (a) 11.8 (b) 3.1 (c) 1165.0 (d) 160.19 (e) 23.463 (f) 4.81 (g) 95.345 (h) 4.825 (i) 235.80

2. (a) 74.010 (b) 2.55 (c) 91.261 (d) 0.995 (e) 0.205 (f) 328.268 (g) 608.364 (h) 852.65





3. (a) 2.7 (b) 126.196 (c) 2.761 (d) 100.2 (e) 0.01 (f) 32.195 (g) 33.033 (h) 2.447 (i) 2.2  
 4. 2.625

**Exercise 6.3**

1. (a) 1.32 (b) 635.4 (c) 7209 (d) 1820.3 (e) 0.5 (f) 15211.5  
 (g) 244.388 (h) 3.1152 (i) 152.0754 (j) 7.506081 (k) 85.809364 (l) 2525.8528  
 2. (a) 5.3 (b) 1.2 (c) 36.419 (d) 0.00001 (e) 2.17 (f) 0.010101 (g) 1.28 (h) 3.45

**Revision Exercise**

1. (a) (iv) (b) (iii) (c) (ii) (d) (iii) (e) (i) (f) (iii) (g) (ii)  
 2. (a) > (b) > (c) = (d) < (e) < (f) > (g) < (h) =  
 3. (a) 0.32 (b) 0.0235 (c) 2.008 (d) 22.11 (e) 3.1 (f) 0.39 (g) 20.09 (h) 0.045  
 4. (a) 12.8 (b) 0.6 (c) 0.625 (d) 3.8 (e) 2.08 (f) 7.16 (g) 70.25 (h) 0.45  
 5. (a) 109 (b) 8.370926 (c) 8.32425 (d) 2.235129 (e) 1235  
 (f) 28.95 (g) 426.9174 (h) 9890 (i) 21230 (j) 853.1  
 6. (a) 3.31 (b) 1.254 (c) 3.45 (d) 2.17 (e) 3.6419 (f) 0.010101

**Ch-7 Introduction to Algebra**

**Exercise : 7.1**

1. (a)  $3n+1$ , where  $n$  = number of squares (b) 37 2.  $3s$ , where  $s$  = side 3. (a)  $P=4s$  (b)  $P=2(l+b)$   
 4. (a)  $m+n$  (b)  $\frac{I}{P}$  (c)  $\frac{Y}{100} \div 320$  (d)  $x-105$  (e)  $n+422$  (f)  $kp$   
 5.  $D=25r$ , where  $r$  = no. of rooms  $D$  = Total no of desks  
 6. (a)  $4l$  (b)  $6b$  7. (a)  $x+x+x+x$  (b)  $x+x+x+x+x+x+x$

**Exercise : 7.2**

1.  $P=2(x+y)$  2.  $P=4k$  3. (a) 18 (b) 7 (c) 8 (d) 310 (e) 0  
 4. (a) 

1	2	3	4	5	6	7
13	14	15	16	17	18	19

1	2	3	4	5	6	7
-4	-3	-2	-1	0	1	2

  
 (c) 

1	2	3	4	5	6	7
13	26	39	52	65	78	91

  
 5.  $a=20b+112$  6.  $(q+2), (q+4)$  7.  $D=3q+60$

**Revision Exercise**

1. (a) (ii) (b) (iv) (c) (ii) (d) (iii) (e) (i) (f) (iii) (g) (iii) (h) (iii) (i) (i) (j) (iv)  
 2. 12 3. brother's age = 20 years, father's age = 42 years 4. (a)  $6x=1840$  (b)  $3m+100=400$   
 5. (a)  $J=5$  (b)  $r=5$  (c)  $x=7$  (d)  $x=8$  6. (a)  $3p$  (b)  $5x$  7. (b)

**Ch-8 Algebraic Equations**

**Exercise 8.1**

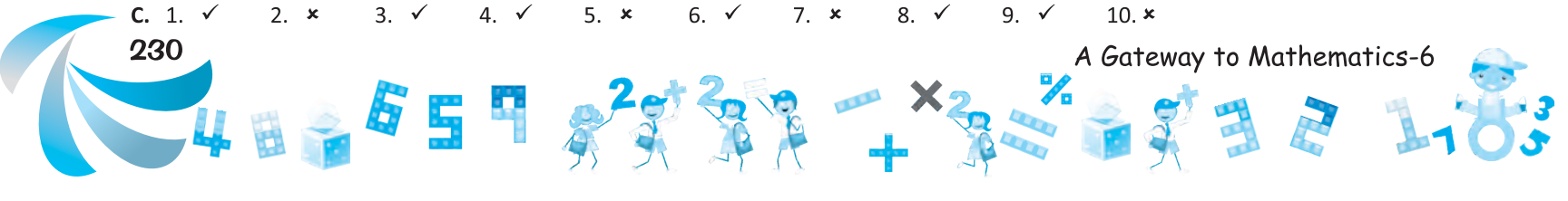
1. (a)  $7+x$  (b)  $\frac{7}{y}$  (c)  $y-5$  (d)  $3x+16$  (e)  $10x$  (f)  $5y-10$  (g)  $\frac{x}{9}$   
 2. (a)  $x=2y$  (b)  $x=y+10$  (c)  $2x+2y=17$  (d)  $2l+4b=54$   
 3. (a)  $x=3$  (b)  $x=12$  (c)  $y=6$  (d)  $x=3$  (e)  $y=3$  (f)  $y=2$   
 4. (a)  $a=8$  (b)  $y=2$  (c)  $x=9$  (d)  $p=9$  (e)  $m=9$  (f)  $y=0$   
 5. (a)  $x=4$  (b)  $m=0$  (c)  $x=25$  (d)  $p=8$  (e)  $x=20$   
 6. (a)  $x=\frac{2}{5}$  (b)  $x=8$  (c)  $x=16$  (d)  $x=5$  (e)  $p=7$  (f)  $m=10$   
 7. 10 8. ₹ 8 9. 15, 16, 17 10. Sukanta's age = 24 years and her brother's age = 4 years

**Revision Exercise**

1. (a) (iii) (b) (i) (c) (iii) (d) (i) (e) (i) (f) (i) (g) (iii) (h) (i)  
 2. (a)  $5y$  (b)  $\frac{x}{9}$  (c)  $4m+10$  (d)  $5x-5$  (e)  $100W$  (f)  $H+7$  (g)  $4J+5F=37$  (h)  $3A+2B=72$   
 3. (a)  $x=6$  (b)  $x=5$  (c)  $y=3$  (d)  $x=4$  (e)  $m=7$   
 4. (a)  $p=9$  (b)  $y=5$  (c)  $x=9$  (d)  $m=0$  (e)  $x=9$   
 5. (a)  $x=6$  (b)  $m=60$  (c)  $a=7$  (d)  $x=4$  (e)  $x=9$  (f)  $x=9$   
 6. 33, 34, 35 7. 69, 70, 71 8. 7 cm, 7 cm

**Formative Assessment-II**

- A. 1. (iii) 2. (i) 3. (iii) 4. (iv) 5. (iv) 6. (ii) 7. (iii) 8. (iii) 9. (iii) 10. (iii)  
 B. 1. value 2. unlike 3. greater 4. decimal part 5. 1  
 C. 1. ✓ 2. ✗ 3. ✓ 4. ✓ 5. ✗ 6. ✓ 7. ✗ 8. ✓ 9. ✓ 10. ✗







**Summative Assessment-I**

**Section-A.**

1. 76941      2. 1001      3. (a) 77      (b) 77      4. Difference between the sums of alternate digits  
 $17-17=0$ , So 70169803 is divisible by 11.
5. LCM=180      6. (i) DCXXXVII (ii) LXXXIX
7.  $\frac{3}{5}$  kg      8.  $23\frac{1}{4}$  km      9. (i)  $7 + \frac{9}{10} + \frac{4}{100}$       (ii)  $100 + 70 + 5 + \frac{3}{10} + \frac{8}{100}$
10. -14, -13, -12, -11 and -6, -7, -8, -9

**Section-B.**

11.  $\frac{1}{4}$ ,  $\frac{6}{12}$ ,  $\frac{9}{12}$ , These are not equivalent fractions      Sum =  $1\frac{1}{2}$
12. 12      13.  $\frac{1}{12}$  and  $\frac{11}{15}$       14. (i)  $x=4$       (ii)  $x=5$       (iii)  $x=6$       15. 20

**Section-C.**

16. ₹ 895      17. 54, -29      18. (i) 0.753      (ii) 1.0

**Ch-9 Ratio and Proportion**

**Exercise 9.1**

1. 7:3      2. (a) 20:1      (b) 10:3      (c) 1:10      (d) 180:1
3. (a) 6:10, 9:15      (b) 42:62, 63:93      (c) 34:164, 51:246      (d) 30:120, 45:180      4. 6:7
5. (a) 7:9 < 10:12      (b) 3:5 < 5:7      (c) 3:4 < 5:6      (d) 13:17 < 351:189
6. (a) 7:12      (b) 19:14      (c) 16:11      7. (a) 3:25      (b) 3:28
8. (a) 21:28:24      (b) 14:35:45      (c) 19:21:7      9. 8:9
10. (a) 101:115      (b) 115:216      (c) 101:216
11. (a) 9:10      (b) 1:10      (c) 5:13      (d) 40:19      (e) 6:1      (f) 1:20      (g) 15:73      (h) 2:7
12. ₹ 3081, ₹ 2844      13. (a) 27:50      (b) 23:50      14. Boys = 620, Girls = 930      15. Cadmium = 21g, Gold = 279g

**Exercise 9.2**

1. (a) not      (b) yes, middle =  $48 \times 70 = 3360$  extreme =  $32 \times 105 = 3360$   
(c) not      (d) yes, middle =  $65 \times 6 = 390$ , extreme =  $39 \times 10 = 390$
2. (a) No      (b) Yes      (c) Yes      (d) Yes      3. (a)  $r=7$       (b)  $r=35$       (c)  $r=20$       (d)  $r=10$
4. yes, 1:3 :: 1:3      5. yes,  $\frac{2}{9} = \frac{18}{81}$

**Exercise 9.3**

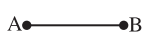

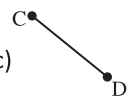

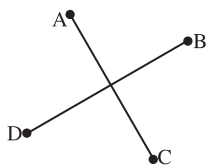
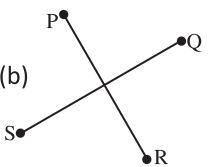
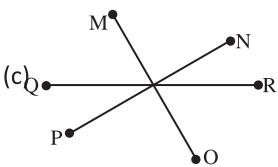

1. ₹ 123.75      2. 36 kg      3. ₹ 209.93      4. (i) 9 hours      (ii) 420 km
5. ₹ 2012.5      6. ₹ 328      7. 1365 items      8. ₹ 2520

**Revision Exercise**

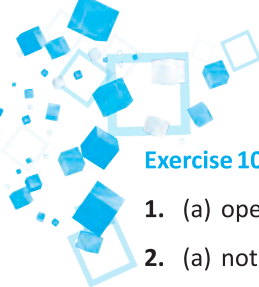
1. (a) (iv)      (b) (i)      (c) (ii)      (d) (iv)      (e) (ii)      (f) (i)      (g) (iii)      (h) (ii)
2. 325 km      3. ₹ 13500      4. (a) 3:10      (b) 1:10      (c) 4:375      (d) 3:365
5. Ranjan = ₹ 36,270; Tapan = ₹ 48,360      6. 4:3      7.  $a=14$       8.  $36^\circ, 54^\circ$       9. ₹ 160      10. 45 minutes

**Ch-10 Basic Geometrical Ideas**

**Exercise 10.1**

1. (a)       (b)       (c)       (d) 
2. (a)       (b)       (c) 
3. (a) 2.8 cm      (b) 1.2 inch      (c) 30 mm      4. (a) A, B, C      (b) A, B, C, D, E      5. Infinite 
6. No      7. (a) False      (b) False      (c) True      (d) False      (e) False  
(f) True      (g) False      (h) False
8. (a) XT      (b) PS      (c) (XT, DS), (XD, TS)      (d) (XS, DT)





### Exercise 10.2

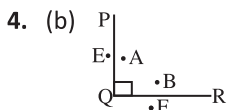
1. (a) open (b) close (c) open (d) close (e) close (f) close  
 2. (a) not (b) yes (c) not (d) yes (e) not



4. (a) Open curve : The curves that do not start and end at the same point are called open curves.  
 (b) Simple curve : A curve that does not cross itself is called simple curve.  
 (c) Close curve : The curves that start and end at the same point are called closed curves.  
 (d) Exterior of a triangle : All the points outside the triangle are the exterior of the triangle.

### Exercise 10.3

1. 2.5 cm 3.1cm 3.2 cm 2. Do it yourself 3. (d)



### Exercise 10.4

1. Do it yourself  
 2. (i) False (ii) False (iii) True (iv) True (v) True  
 (vi) False (vii) False (viii) True (ix) False (x) False  
 3. (i) Polygon : An enclosed figure with minimum three sides is called polygon.  
 (ii) Quadrilateral : The polygons whose number of sides are four called quadrilaterals.  
 (iii) Sector of a circle : A region in the interior of a circle enclosed by an arc and a pair of radii is called a sector.  
 (iv) Segment of a circle : A region in the interior of a circle enclosed by an arc and a chord is called segment.

### Revision Exercise

1. (a) (ii) (b) (iii) (c) (iv) (d) (ii) (e) (ii) (f) (i) (g) (iii) (h) (iv)  
 2. Do it yourself  
 3. (a) False (b) True (c) True (d) True (e) True (f) False (g) True (h) False  
 4. (a)  $\widehat{TY}$ ,  $\widehat{ML}$  (b) none (c) XY, TL (d) OX, OY, OT, OL, OM (e) OTY, OML (f) B (g) A  
 5. (a) Two or more lines that meet at a point are called intersecting lines.  
 (b) Diameter is the longest chord of the circle.  
 (c) No, a triangle does not have a diagonal.  
 (d) Arc is a part of a circle. Chord is a line segment joining any two point on the circle.  
 6. Do it yourself 7. Do it yourself 8. Do it yourself

## Ch-11 Understanding Elementary Shapes

### Exercise 11.1

1. Do it yourself 2.  $AB=CD$  3. A line segment is a part of a line. It has two ends points and a definite length.  
 4. (i) AB, BC, AC, AD, AE, BE, BD, ED, CD (ii) AB, BC, CD, DE, EF, FA  
 (iii) AB, AE, AF, AC, BC, BF, BD, CE, CD, FE, FD, DE (iv) OP, OQ, OR, PR, PQ, QR, OD, OC, OB, OA, DC, DB, DA, CB, CA, BA  
 (v) AB, AC, BC, PQ, PR, QR  
 5. The thickness of a ruler may cause difficulties in reading of the marks on it. This problem can be avoided by using a divider.  
 6. (a) 10 (b) 10 (c) 10 (d) 10 7. Do it yourself



### Exercise 11.2

1. (a)  $\frac{1}{4}$  (b)  $\frac{1}{2}$  (c)  $\frac{1}{2}$       2. (a) 2 right angles (b) 1 right angle (c) 2 right angles
3. (a)  $180^\circ$  (b)  $90^\circ$  (c)  $180^\circ$       4. (a) stop at 6 (b) stop at 12 (c) stop at 6
5. (a) 1 right angle (b) 1 right angle (c) 1 right angle (d) 2 right angles
6. (a) stop at 1 (b) stop at 7 (c) stop at 9

### Exercise 11.3

1. Do it yourself
2. (a) acute angle (b) reflex angle (c) obtuse angle (d) acute angle (e) obtuse angle  
(f) reflex angle (g) obtuse angle (h) reflex angle (i) acute angle (j) obtuse angle
3. (a) acute angle (b) right angle (c) acute angle  
(d) acute angle (e) obtuse angle (f) straight angle
4. (a)  $\angle AOC, \angle BOD, \angle COE, \angle DOF$  (b)  $\angle AOB, \angle BOC, \angle COD, \angle DOE$  (c)  $\angle AOE, \angle BOF, \angle COG, \angle DOH$   
(d)  $\angle AOD, \angle BOE, \angle COF, \angle DOG$  (e)  $\angle AOF, \angle BOG, \angle COH, \angle DOA$
5. (i) (f) (ii) (b) (iii) (e) (iv) (d) (v) (c) (vi) (a)

### Exercise 11.4

1. (a)  $55^\circ$  (b)  $110^\circ$  (c)  $90^\circ$  (d)  $55^\circ, 125^\circ, 55^\circ$
2. (a)  $45^\circ$  acute (b)  $135^\circ$  obtuse (c)  $90^\circ$  right (d)  $90^\circ$  right (e)  $225^\circ$  or  $135^\circ$  obtuse (f)  $180^\circ$  straight
3. (a)  $A=135^\circ, B=90^\circ$  (b)  $A=90^\circ, B=180^\circ$  4. (a) F (b) F (c) T (d) T
5. (a) straight (b) obtuse (c) obtuse (d) acute (e) acute
6. (a) Do it yourself (b) Do it yourself
7.  $\angle Q, P=55^\circ, Q=65^\circ$

### Exercise 11.5

1. Do it yourself
2. (a) Yes (b) No (c) DE, CE (d) (i) Yes (ii) No (iii) Yes
3. (a) F (b) F (c) T (d) F (e) T
4. (a)  $\checkmark$  (b)  $\checkmark$  (c)  $\times$  5.  $60^\circ, 90^\circ, 30^\circ$  and  $45^\circ, 90^\circ, 45^\circ$ . They have a common angle of  $90^\circ$ .

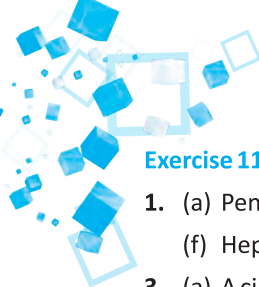
### Exercise 11.6

1. (a) Triangle : A three sides polygon is called a triangle. The sum of the three angles of a triangle is always  $180^\circ$ .  
(b) Scalene triangle : A triangle having all three sides unequal is called scalene triangle.  
(c) Right-angled triangle : If any one angle in a triangle is a right angle then the triangle is called right-angled triangle.  
(d) Equilateral triangle : A triangle having all the three sides equal in length is called equilateral triangle.  
(e) Isosceles triangle : A triangle which has two sides of equal length is called isosceles triangle.
2. (a) Scalene (b) Scalene (c) Equilateral (d) Isosceles  
(e) Isosceles (f) Equilateral (g) Scalene (h) Isosceles
3. (a)  $C=55^\circ$  (b)  $R=45^\circ$  (c)  $F=10^\circ$  (d)  $Z=85^\circ$  (e)  $R=60^\circ$  (f)  $C=60^\circ$
4. (a) Right-angled triangle (b) Isosceles Acute-angled triangle (c) Scalene triangle  
(d) Scalene triangle (e) Equilateral triangle
5. (i) (f) (ii) (e) (iii) (b) (iv) (g) (v) (a) (vi) (c) (vii) (d)

### Exercise 11.7

1. (a) because, all the sides are equal. (b) because opposite sides are equal. (c) because, all the angles are  $90^\circ$ .  
(d) because, these all have four sides. (e) because, it has pairs of 2 parallel.
2. (a) T (b) F (c) T (d) T (e) F (f) T





### Exercise 11.8

1. (a) Pentagon (b) Quadrilateral (c) Hexagon (d) Pentagon (e) Octagon  
 (f) Heptagon (g) Nonagon (h) Hexagon
2. (a) (c) (d) (f) (h) (k)
3. (a) A circle is not a polygon because, it does not have straight sides.  
 (b) It is not a polygon because, it is not a closed figure. (c) It is a polygon  
 (d) It is not a polygon because, it has a curve line.
4. (a) Pentagon (b) Square (c) Quadrilateral (d) Trapezium (e) Triangle (f) Octagon

### Exercise 11.9

1. (a) (v) (b) (i) (c) (iii) (d) (iv) (e) (ii)  
 (a) football, orange (b) bottle, a piece of pipe (c) roof of the temple, paper weight  
 (d) book, matchbox (e) birthday cap, funnel
2. (a) Edge : Two faces meet at a line segment called an edge.  
 (b) Face : Face is the surface of solid, which is enclosed by edges.  
 (c) Cube : A cube is three dimensional solid figure which have 6 faces, 12 edges and 8 vertices.  
 (d) Vertices: Vertices are the points where three or more edges meet.  
 (e) Cone : Cone is a three dimensional solid figure bounded by a base in a plane and surface.

### Revision Exercise

1. (a) (ii) (b) (iii) (c) (ii) (d) (iv) (e) (iv) (f) (iv) (g) (ii) (h) (ii)
2. (i) AB, BC, CD, DE, EF, FG, GH, HA, AC, CE, EG, GA, BF, HD (ii) OA, OB, OC, OD, OE, OF  
 (iii) AB, BC, CA, AD, AF, FB, BD, BE, DC, CE, CF, EA (iv) AB, BC, CD, DE, EF, FA  
 (v) PQ, QR, RP, DE, EF, FD
3. (a) acute (b) obtuse (c) reflex (d) obtuse (e) reflex (f) reflex  
 (g) acute (h) obtuse (i) obtuse (j) obtuse (k) acute (l) reflex
4. (a) C=45 (b) R=45 (c) Z=65 (d) C=60 (e) R=47
5. (a) Right-angled triangle (b) Isosceles Acute-angled triangle (c) Scalene triangle  
 (d) Scalene triangle (e) Equilateral triangle

### Formative Assessment-III

- A. 1. (ii) 2. (iii) 3. (ii) 4. (iii) 5. (iv) 6. (c) 7. (ii) 8. (iii) 9. (ii) 10. (ii)  
 B. 1. three 2. 90° 3. protractor 4. ∴ 5. one  
 C. 1. ✓ 2. ✗ 3. ✓ 4. ✗ 5. ✓ 6. ✗ 7. ✗ 8. ✓ 9. ✓ 10. ✗

### Ch-12 Geometrical Constructions

#### Exercise 12.1

Do it yourself

#### Exercise 12.2

Do it yourself

### Revision Exercise

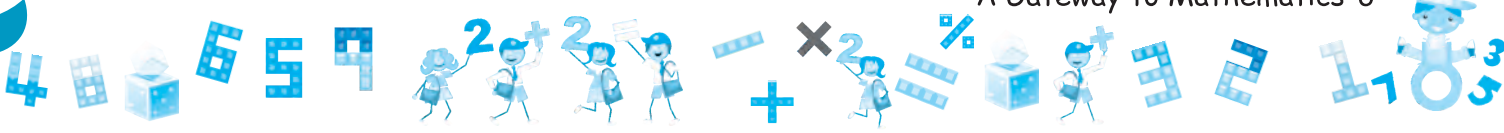
1. (a) (iii) (b) (ii) (c) (ii) (d) (iv) (e) (iv) (f) (ii) (g) (iv)

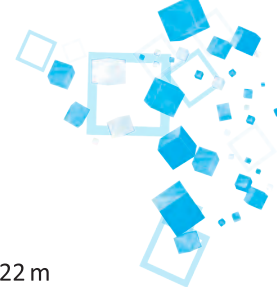
Questions 2 to 10, Do it yourself

### Ch-13 Mensuration

#### Exercise 13.1

1. (a) 25 cm (b) 19 cm (c) 36 cm (iv) 30 cm (e) 24 cm  
 2. 236.6 m 3. 150 cm 4. 75 cm 5. Ramesh, 340m 6. 9m  
 7. (a) 46 m (b) 3 m 40 cm (c) 157 m (d) 7 m 50 cm (e) 5 m 50 cm (f) 2 m 84 cm  
 8. (a) 72m (b) 20m (c) 5 m (d) 4 m 20 cm (e) 2 m84 cm (f) 18m  
 9. (a) 32 cm (b) 24 cm





**Exercise 13.2**

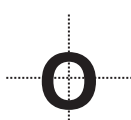
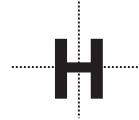

1. (a)  $40\text{ cm}^2$  (b)  $216\text{ cm}^2$  (c)  $369.75\text{ m}^2$  (d)  $832\text{ cm}^2$  (e)  $1680\text{ m}^2$  2. 17 m  
 3. 24 m 4.  $14\text{ m}^2$  5. (a)  $64\text{ cm}^2$  (b)  $289\text{ cm}^2$  (c)  $25\text{ m}^2$  (d)  $441\text{ m}^2$   
 6.  $4s^2, 1:4$  7. Cost of fencing = ₹1080 Cost of turfing = ₹31500 8. Area will not be change. 9. 22 m

**Revision Exercise**

1. (a) (iv) (b) (iii) (c) (i) (d) (i) (e) (i) (f) (iii) (g) (ii)  
 2. (a) 24 m (b) 28 cm 3. 200 cm 4. 100 cm 5. 320 m 6.  $2625\text{ cm}^2$  7. 22 cm 8. 15 m 60 cm

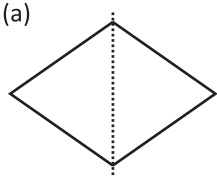
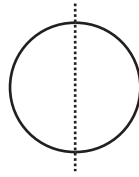
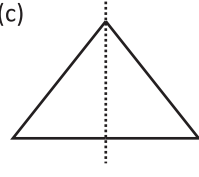
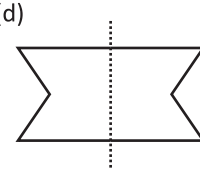
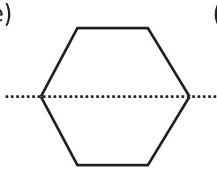
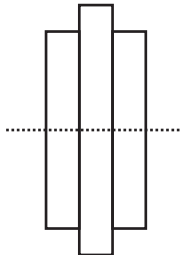
**Ch-14 Symmetry**

**Exercise 14.1**

1. (a)  (b)  (c) 

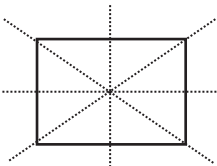
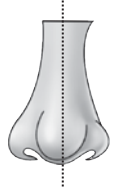

2. (a) Symmetrical (b) Non-symmetrical (c) Symmetrical (d) Symmetrical (e) Non-symmetrical  
 (f) Symmetrical (g) Non-symmetrical (h) Symmetrical (i) Non-symmetrical  
 3. Scalene Triangle → Zero Square → Four Circle → infinite

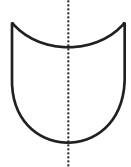
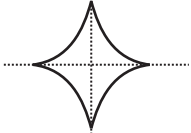
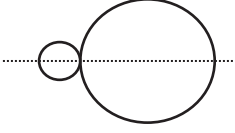
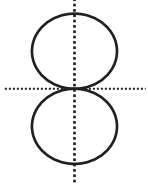
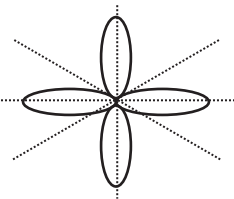
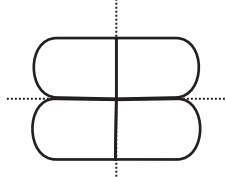
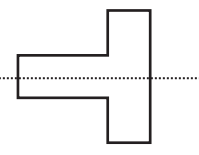
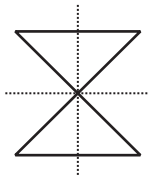
4. Do it yourself

5. (a)  (b)  (c)  (d)  (e)  (f) 

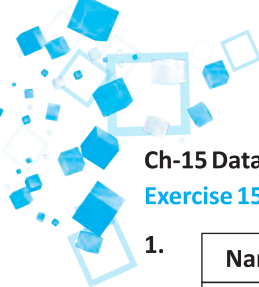
**Revision Exercise**

1. (a) (ii) (b) (ii) (c) (iii) (d) (iv) (e) (iii) (f) (ii) (g) (iii) (h) (i)  
 2. Do it yourself 3. Do it yourself 4. Do it yourself 5. Do it yourself 6. Yes horizontal from lateral view  
 7. A reflection symmetry is a type of symmetry in which one half of the object is the mirror image of the other.

8. (a)  (b)  9. (b) 

10. (a)  (b)  (c)  (d)   
 (e)  (f)  (h)  (i) 





Ch-15 Data Handling

Exercise 15.1

1.

Name of Software	Computer System	Tally Marks
Java	10	
Acrobat	7	
C++	8	

2. 25, 27, 29, 35, 38, 40, 45, 47, 52, 54

(i) 25 years

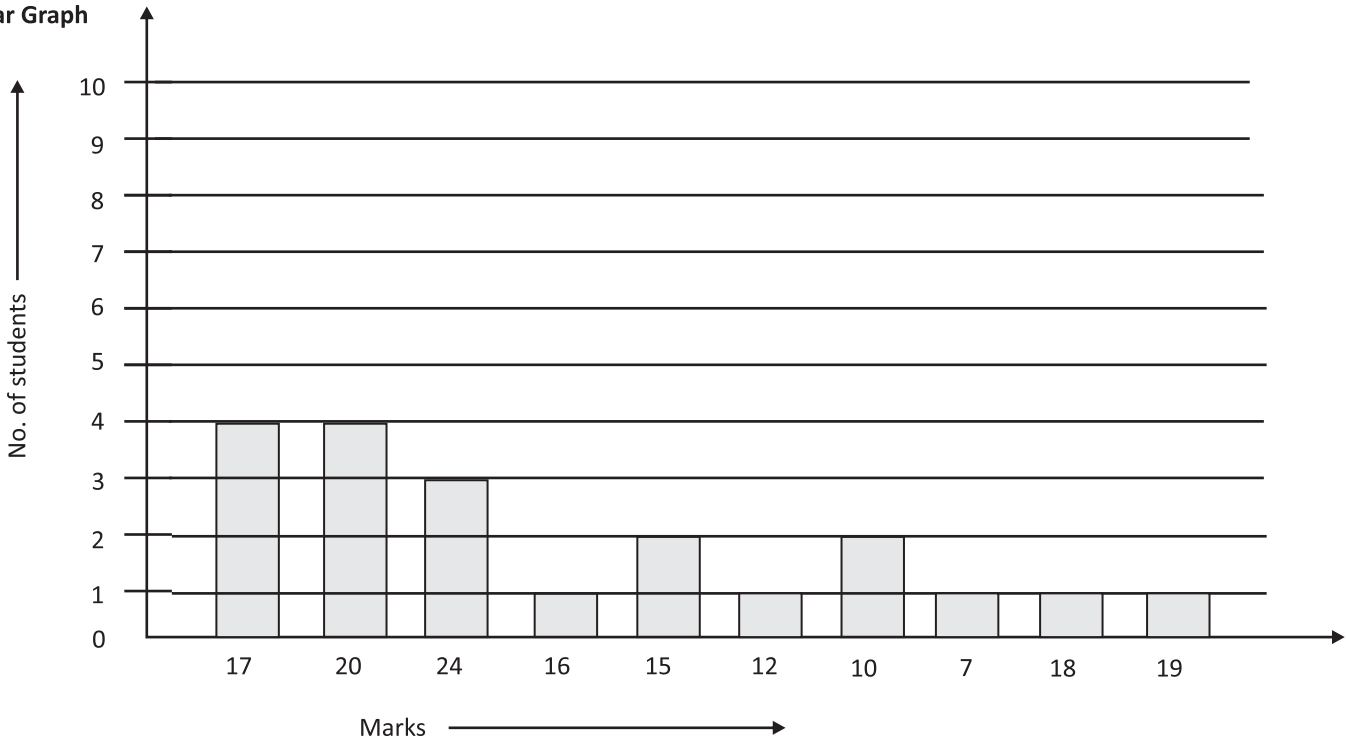
(ii) five teachers

3.

Marks	No. of Student	Tally marks
17	4	
20	4	
24	3	
16	1	
15	2	
12	1	
10	2	
7	1	
18	1	
19	1	

Total students 20

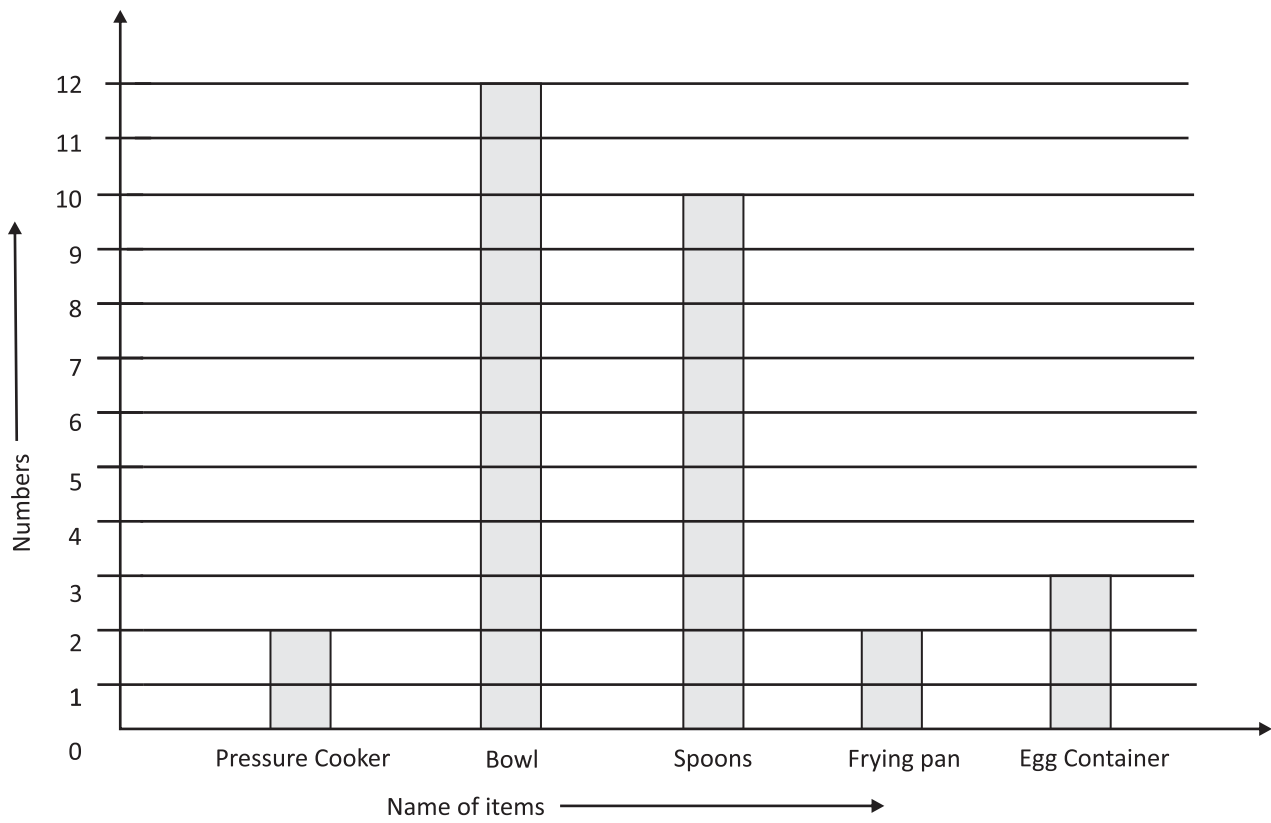
Bar Graph



4. Do it yourself



5.

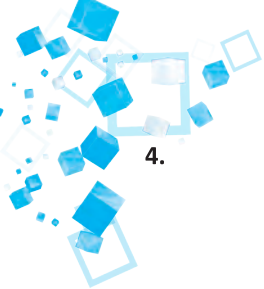


**Revision Exercise**

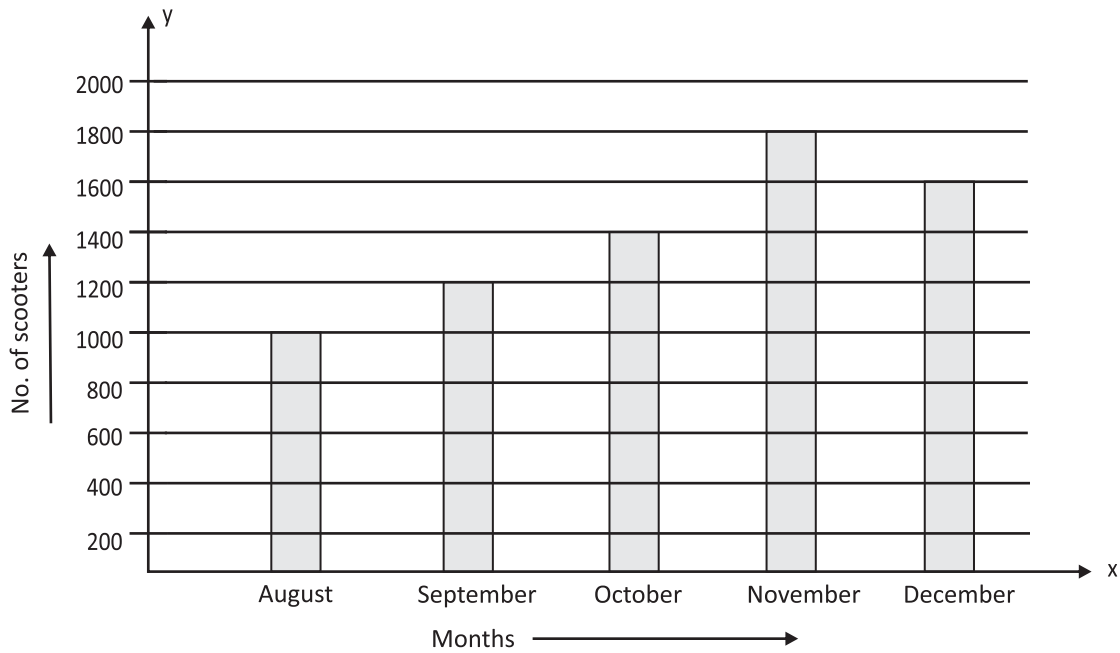
- (a) (ii)      (b) (iv)      (c) (i)      (d) (iv)      (e) (iv)      (f) (ii)
- Do it yourself

3.

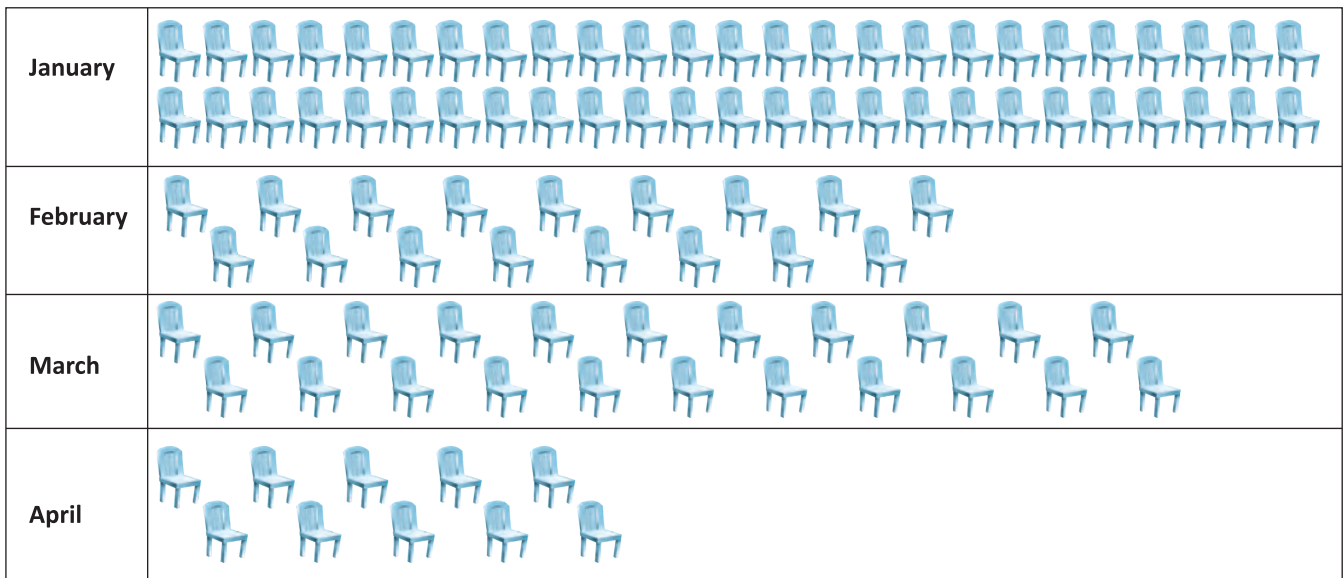
Money (in ₹)	No. of students	Tally marks
150	5	≡
250	3	III
145	5	≡
122	1	I
160	2	II
175	2	II
200	1	I
230	1	I



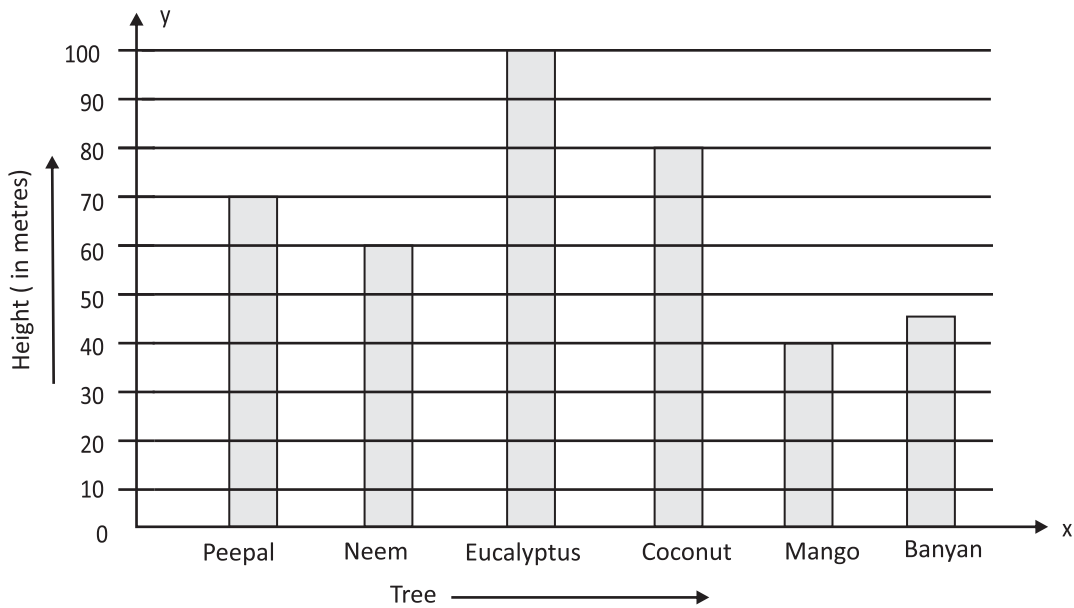
4.



5.



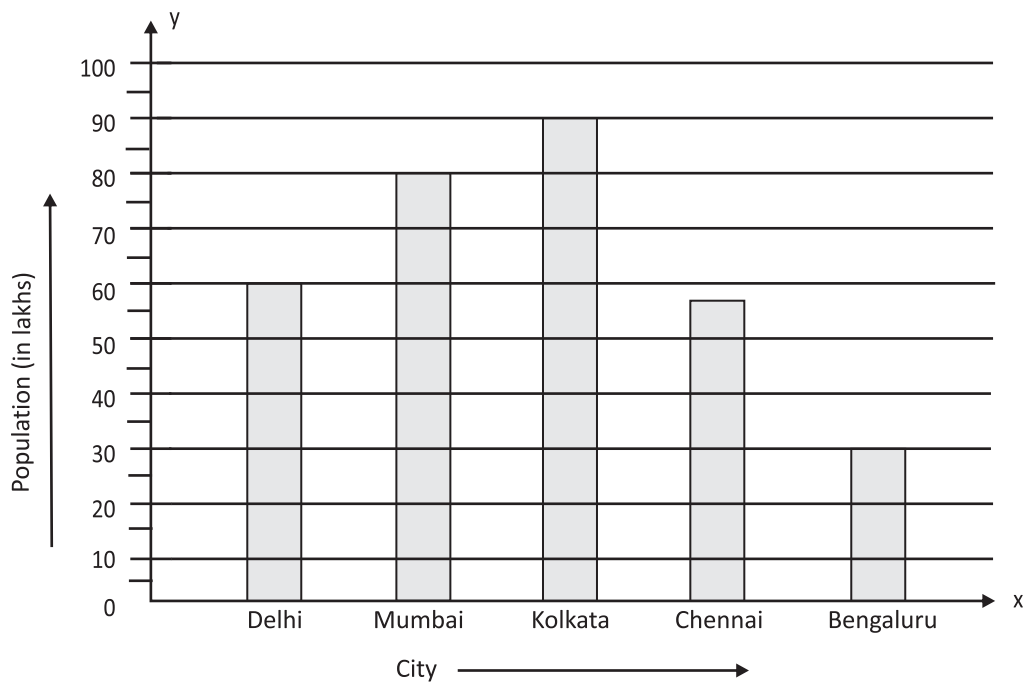
6.



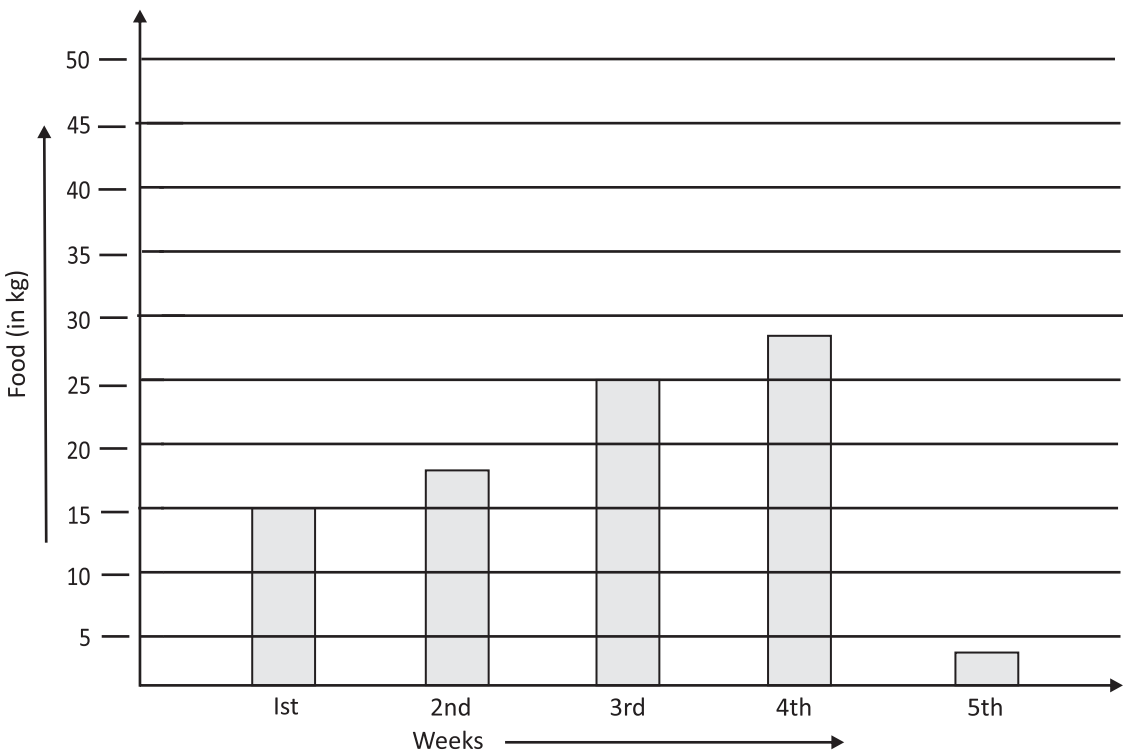


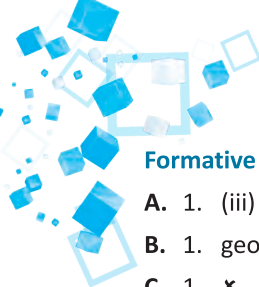


7.



8. (a) D                    (b) A, C, F                    (c) D  
9. (a) Tuesday                    (b) ₹110                    (c) Monday  
10. (a) 17 people                    (b) 5 people  
11.





**Formative Assessment-IV**

- A. 1. (iii) 2. (iii) 3. (iii) 4. (iii) 5. (iii) 6. (iv) 7. (ii) 8. (iii) 9. (iv) 10. (i)  
 B. 1. geometry 2. 10 3. 84 cm 4. three 5. primary  
 C. 1. × 2. × 3. ✓ 4. ✓ 5. × 6. ✓ 7. × 8. ✓ 9. ✓ 10. ✓

**Summative Assessment - 2**

**Section-A**

1.  $x = 135$  2. (a)  $\frac{14}{24}, \frac{28}{48}$  (b)  $\frac{8}{14}, \frac{12}{21}$   
 3.  $\angle ABC, \angle EBC, \angle DBC,$   
 $\angle ABE, \angle ABD, \angle EBD$   
 4.  $\frac{1}{4}$  5. 70m 6. ₹4375 7. 19:15  
 8. Every triangle has three medians but only one centroid. Medians are line segments but centroid is a point where the three medians bisect each other.  
 9.  $90^\circ$  and  $30^\circ$ . 10. 4m 50cm

**Section-B**

11. Do it yourself 12. 56m 13.  $x = 13$   
 14. (a) OB, OD, OE, OG, OI, OJ (b) BG, DI, EJ  
 (c) AC, FH (d) O  
 15. Do it yourself.

**Section-C**

16. (a)  $x = 4$  (b)  $x = 4$  17. Do it yourself  
 18.

