

ANSWERS



EXERCISE 1.1

- (a) Lahulspiti: -8°C , Srinagar: -2°C , Shimla: 5°C , Ooty: 14°C , Bangalore: 22°C
(b) 30°C (c) 6°C (d) Yes; No 2. 35
- -7°C ; -3°C 4. 6200 m 5. By a positive integer; Rs 358
- By a negative integer; -10 . 7. (ii) is the magic square
- (a) $<$ (b) $<$ (c) $>$ (d) $s <$
(e) $>$
- (i) 11 jumps (ii) 5 jumps (iii) (a) $-3 + 2 - 3 + 2 - 3 + 2 - 3 + 2 - 3 + 2 - 3 + 2 - 3 = -8$
(b) $4 - 2 + 4 - 2 + 4 = 8$
8 in (b) represents going up 8 steps.

EXERCISE 1.2

- One such pair could be:
(a) $-10, 3$ (b) $-6, 4$; $(-6 - 4 = -10)$ (c) $-3, 3$
- One such pair could be:
(a) $-2, -10$; $[-2 - (-10) = 8]$ (b) $-6, 1$
(c) $-1, 2$; $(-1 - 2 = -3)$
- Scores of both the teams are same, i.e., -30 ; Yes
- (i) -5 (ii) 0 (iii) -17 (iv) -7
(v) -3

EXERCISE 1.3

- (a) -3 (b) -225 (c) 630 (d) 316 (e) 0
(f) 1320 (g) 162 (h) -360 (i) -24 (j) 36
- (i) $-a$ (ii) (a) 22 (b) -37 (c) 0
- $-1 \times 5 = -5$, $-1 \times 4 = -4 = -5 + 1$, $-1 \times 3 = -3 = -4 + 1$,
 $-1 \times 2 = -2 = -3 + 1$, $-1 \times 1 = -1 = -2 + 1$, $-1 \times 0 = 0 = -1 + 1$ so, $-1 \times (-1) = 0 + 1 = 1$.
- (a) 480 (b) -53000 (c) -15000 (d) -4182
(e) -62500 (f) 336 (g) 493 (h) 1140
- -10°C 7. (i) 8 (ii) 15 (iii) 0
- (a) Loss of Rs 1000 (b) 4000 bags
- (a) -9 (b) -7 (c) 7 (d) -11

EXERCISE 1.4

1. (a) -3 (b) -10 (c) 4 (d) -1
 (e) -13 (f) 0 (g) 1 (h) -1 (i) 1
3. (a) 1 (b) 75 (c) -206 (d) -1
 (e) -87 (f) -48 (g) -10 (h) -12
4. (-6, 2), (-12, 4), (12, -4), (9, -3), (-9, 3) (There could be many such pairs)
5. 9 p.m.; -14°C 6. (i) 8 (ii) 13 7. 1 hour

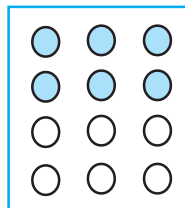
EXERCISE 2.1

1. (i) $\frac{7}{5}$ (ii) $\frac{39}{8} (=4\frac{7}{8})$ (iii) $\frac{31}{35}$ (iv) $\frac{91}{165}$
- (v) $\frac{13}{5} (=2\frac{3}{5})$ (vi) $\frac{37}{6} (=6\frac{1}{6})$ (vii) $\frac{39}{8} (=4\frac{7}{8})$
2. (i) $\frac{2}{3}, \frac{8}{21}, \frac{2}{9}$ (ii) $\frac{7}{10}, \frac{3}{7}, \frac{1}{5}$ 3. Yes 4. $\frac{139}{3} (=46\frac{1}{3})$ cm
5. (i) $8\frac{17}{20}$ cm (ii) $7\frac{5}{6}$ cm; Perimeter of $\triangle ABE$ is greater.
6. $\frac{3}{10}$ cm 7. $\frac{2}{5}$; Ritu; $\frac{1}{5}$ 8. Vaibhav; by $\frac{1}{6}$ of an hour.

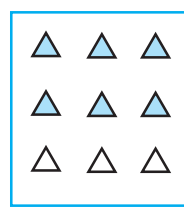
EXERCISE 2.2

1. (i) (d) (ii) (b) (iii) (a) (iv) (c)
2. (i) (c) (ii) (a) (iii) (b)
3. (i) $4\frac{1}{5}$ (ii) $1\frac{1}{3}$ (iii) $1\frac{5}{7}$ (iv) $1\frac{1}{9}$ (v) $2\frac{2}{3}$
- (vi) 15 (vii) $6\frac{2}{7}$ (viii) 16 (ix) $4\frac{1}{3}$ (x) 9

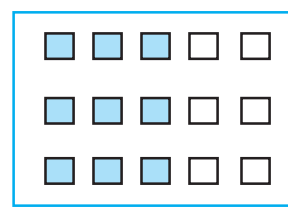
4. One way of doing this is:



(i)



(ii)



(iii)

5. (a) (i) 12 (ii) 23 (b) (i) 12 (ii) 18 (c) (i) 12 (ii) 27 (d) (i) 16 (ii) 28

6. (a) $15\frac{3}{5}$ (b) $33\frac{3}{4}$ (c) $15\frac{3}{4}$ (d) $25\frac{1}{3}$
 (e) $19\frac{1}{2}$ (f) $27\frac{1}{5}$
7. (a) (i) $1\frac{3}{8}$ (ii) $2\frac{1}{9}$ (b) (i) $2\frac{19}{48}$ (ii) $6\frac{1}{24}$ 8. (i) 2 litres (ii) $\frac{3}{5}$

EXERCISE 2.3

1. (i) (a) $\frac{1}{16}$ (b) $\frac{3}{20}$ (c) $\frac{1}{3}$ (ii) (a) $\frac{2}{63}$ (b) $\frac{6}{35}$ (c) $\frac{3}{70}$
2. (i) $1\frac{7}{9}$ (ii) $\frac{2}{9}$ (iii) $\frac{9}{16}$ (iv) $1\frac{2}{25}$
 (v) $\frac{5}{8}$ (vi) $1\frac{13}{20}$ (vii) $1\frac{13}{35}$
3. (i) $2\frac{1}{10}$ (ii) $4\frac{44}{45}$ (iii) 8 (iv) $2\frac{1}{42}$ (v) $1\frac{33}{35}$ (vi) $7\frac{4}{5}$ (vii) $2\frac{1}{7}$
4. (i) $\frac{3}{5}$ of $\frac{5}{8}$ (ii) $\frac{1}{2}$ of $\frac{6}{7}$ 5. $2\frac{1}{4}$ m 6. $10\frac{1}{2}$ hours 7. 44 km
8. (a) (i) $\frac{5}{10}$ (ii) $\frac{1}{2}$ (b) (i) $\frac{8}{15}$ (ii) $\frac{8}{15}$

EXERCISE 2.4

1. (i) 16 (ii) $\frac{84}{5}$ (iii) $\frac{24}{7}$ (iv) $\frac{3}{2}$ (v) $\frac{9}{7}$ (vi) $\frac{7}{5}$
2. (i) $\frac{7}{3}$ (improper fraction) (ii) $\frac{8}{5}$ (improper fraction) (iii) $\frac{7}{9}$ (proper fraction)
 (iv) $\frac{5}{6}$ (proper fraction) (v) $\frac{7}{12}$ (proper fraction) (vi) 8 (whole number)
 (vii) 11 (whole number)
3. (i) $\frac{7}{6}$ (ii) $\frac{4}{45}$ (iii) $\frac{6}{91}$ (iv) $\frac{13}{9}$ (v) $\frac{7}{8}$ (vi) $\frac{31}{49}$
4. (i) $\frac{4}{5}$ (ii) $\frac{2}{3}$ (iii) $\frac{3}{8}$ (iv) $\frac{35}{9}$ (v) $\frac{21}{16}$ (vi) $\frac{4}{15}$
 (vii) $\frac{48}{25}$ (viii) $\frac{11}{6}$

EXERCISE 2.5

1. (i) 0.5 (ii) 0.7 (iii) 7 (iv) 1.49 (v) 2.30 (vi) 0.88
2. (i) ₹ 0.07 (ii) ₹ 7.07 (iii) ₹ 77.77 (iv) ₹ 0.50 (v) ₹ 2.35
3. (i) 0.05m, 0.00005 km (ii) 3.5 cm, 0.035m, 0.000035 km
4. (i) 0.2 kg (ii) 3.470 kg (iii) 4.008 kg
5. (i) $2 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$ (ii) $2 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$
- (iii) $2 \times 100 + 0 \times 10 + 0 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100}$
- (iv) $2 \times 1 + 0 \times \frac{1}{10} + 3 \times \frac{1}{100} + 4 \times \frac{1}{1000}$
6. (i) Ones (ii) Tens (iii) Tenths (iv) Hundredths (v) Thousandths
7. Ayub travelled more by 0.9 km or 900 m 8. Sarala bought more fruits 9. 14.6 km

EXERCISE 2.6

1. (i) 1.2 (ii) 36.8 (iii) 13.55 (iv) 80.4 (v) 0.35 (vi) 844.08
- (vii) 1.72
2. 17.1 cm²
3. (i) 13 (ii) 368 (iii) 1537 (iv) 1680.7 (v) 3110 (vi) 15610
- (vii) 362 (viii) 4307 (ix) 5 (x) 0.8 (xi) 90 (xii) 30
4. 553 km 5. (i) 0.75 (ii) 5.17 (iii) 63.36 (iv) 4.03 (v) 0.025
- (vi) 1.68 (vii) 0.0214 (viii) 10.5525 (ix) 1.0101 (x) 110.011

EXERCISE 2.7

1. (i) 0.2 (ii) 0.07 (iii) 0.62 (iv) 10.9 (v) 162.8 (vi) 2.07
- (vii) 0.99 (viii) 0.16
2. (i) 0.48 (ii) 5.25 (iii) 0.07 (iv) 3.31 (v) 27.223 (vi) 0.056
- (vii) 0.397
3. (i) 0.027 (ii) 0.003 (iii) 0.0078 (iv) 4.326 (v) 0.236 (vi) 0.9853
4. (i) 0.0079 (ii) 0.0263 (iii) 0.03853 (iv) 0.1289 (v) 0.0005
5. (i) 2 (ii) 180 (iii) 6.5 (iv) 44.2 (v) 2 (vi) 31
- (vii) 510 (viii) 27 (ix) 2.1 6. 18 km

EXERCISE 3.1

2.

Marks	Tally Marks	Frequency
1		1
2		2

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

- (i) 9 (ii) 1 (iii) 8 (iv) 5
3. 2 4. 50 5. (i) 12.5 (ii) 3 (iii) $\frac{0+8+6+4}{4} = \frac{18}{4}$ or $\frac{9}{2}$ (iv) A
6. (i) Highest marks = 95, Lowest marks = 39 (ii) 56 (iii) 73 7. 2058
8. (i) 20.5 (ii) 5.9 (iii) 5 9. (i) 151 cm (ii) 128 cm (iii) 23 cm (iv) 141.4 cm (v) 5

EXERCISE 3.2

1. Mode = 20, Median = 20, Yes. 2. Mean = 39, Mode = 15, Median = 15, No.
3. (i) Mode = 38, 43; Median = 40 (ii) Yes, there are 2 modes.
4. Mode = 14, Median = 14
5. (i) T (ii) F (iii) T (iv) F

EXERCISE 3.3

1. (a) Cat (b) 8
4. (i) Maths (ii) S. Science (iii) Hindi
5. (ii) Cricket (iii) Watching sports
6. (i) Jammu (ii) Jammu, Bangalore
- (iii) Bangalore and Jaipur or Bangalore and Ahmedabad (iv) Mumbai

EXERCISE 3.4

1. (i) Certain to happen (ii) Can happen but not certain (iii) Impossible
- (iv) Can happen but not certain (v) Can happen but not certain
2. (i) $\frac{1}{6}$ (ii) $\frac{1}{6}$ 3. $\frac{1}{2}$

EXERCISE 4.1

1. (i) No. (ii) No (iii) Yes (iv) No (v) Yes (vi) No
- (vii) Yes (viii) No (ix) No (x) No (xi) Yes