

ANSWERS

Unit 1

- | | | | | | |
|------------------------------------|-----------|-------------------------------------|-----------------------------|---------|---------|
| 1. (C) | 2. (C) | 3. (D) | 4. (B) | 5. (D) | 6. (D) |
| 7. (C) | 8. (B) | 9. (D) | 10. (C) | 11. (D) | 12. (C) |
| 13. (D) | 14. (D) | 15. (B) | 16. (A) | 17. (C) | 18. (C) |
| 19. (B) | 20. (B) | 21. (D) | 22. (B) | 23. (B) | 24. (A) |
| 25. (C) | 26. (D) | 27. (B) | 28. (A) | 29. (C) | 30. (B) |
| 31. (D) | 32. (D) | 33. (B) | 34. (A) | 35. (A) | 36. (C) |
| 37. (B) | 38. (C) | 39. T | 40. F | 41. T | 42. T |
| 43. F | 44. T | 45. F | 46. T | 47. F | 48. F |
| 49. F | 50. T | 51. F | 52. F | 53. T | 54. F |
| 55. F | 56. F | 57. F | 58. T | 59. F | 60. F |
| 61. T | 62. T | 63. T | 64. F | 65. F | 66. T |
| 67. F | 68. T | 69. T | 70. F | 71. T | 72. T |
| 73. F | 74. T | 75. T | 76. F | 77. T | 78. T |
| 79. T | 80. F | 81. F | 82. F | 83. T | 84. F |
| 85. T | 86. F | 87. T | 88. F | 89. T | 90. T |
| 91. F | 92. F | 93. T | 94. T | 95. T | 96. F |
| 97. F | 98. T | 99. (a) 1 (b) 1 | | | |
| 100. (a) 1000 (b) 10 (c) 10,00,000 | | 101. (a) 1000 (b) 1000 (c) 1000,000 | | | |
| 102.1 | 103. 1650 | 104. 1290000 | 105. 422000 106. descending | | |

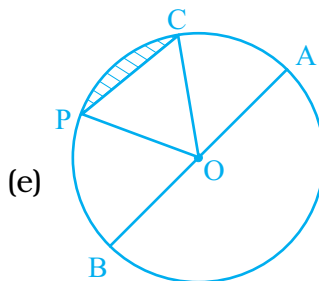
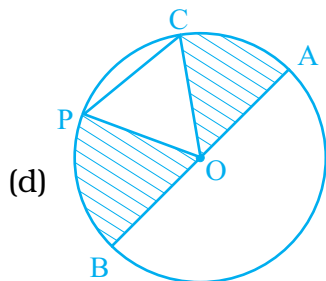
- 107.** smallest **108.** 6 **109.** 5,23,78,401 **110.** L **111.** LXVI
112. 2,538,000 **113.** 0 **114.** 106160 **115.** 99999 **116.** 401
117. 1000 **118.** number **119.** 100005 **120.** addition, multiplication
121. addition, multiplication **122.** 0 **123.** addition **124.** 6195
125. 1001 **126.** 0 **127.** 0 **128.** 1 **129.** 68 **130.** 8925
131. 1 **132.** 17 **133.** 27 **134.** 7860 **135.** 100 **136.** multiple
137. 1 **138.** 2 **139.** perfect **140.** composite **141.** prime
142. co-prime **143.** 25 **144.** 0 **145.** 0, 5 **146.** 2
147. multiple **148.** 11 **149.** multiple **150.** factors
151. (i)- (d), (ii)- (f), (iii)- (b), (iv)- (e), (v)- (c)
152. 25843, 13584, 8435, 5348, 4835. **153.** 67205602, 30040700
154. (a) $7 \times 10000 + 4 \times 1000 + 8 \times 100 + 3 \times 10 + 6 \times 1$
(b) $5 \times 100000 + 7 \times 10000 + 4 \times 1000 + 0 \times 100 + 2 \times 10 + 1 \times 1$
(c) $8 \times 1000000 + 9 \times 100000 + 0 \times 10000 + 7 \times 1000 + 0 \times 100 + 1 \times 10 + 0 \times 1$
155. ascending order – (b), (c), (a), (d), descending order – (d), (a), (c), (b)
156. 142,800,000 **157.** 589 millions, 589,000,000
158. Earth, 2100000m
159. Tripura-Three million, one hundred ninty-nine thousand, two hundred three; Meghalaya-Two million, three hundred eighteen thousand, eight hundred twenty two.
160. 4230 **161.** 67530 **162.** 161266 **163.** 46120 **164.** 1
165. 6, 4, 2 **166.** 9979003568 **167.** 85041 **168.** 969987
169. 179370 **170.** 32198 **171.** 12000 **172.** 98756, 10253
173. 2768g or 2kg 768g **174.** 150 boxes **175.** 50000 **176.** 30
177. (a)1400 (b) 1200 (c) 14700 (d) 31300
178. (a) 2590 (b) 69100 (c) 6380 (d) 61790
179. (a) 2700 (b) 34100 (c) 97200 (d) 1098100

- 180.** 17000 **181.** 5600000 **182.** 457755 **183.** 24480
184. 220 **185.** 204 **186.** 15000kg **187.** Rs. 454102
188. 960000g **189.** 62 **190.** 60 L **191.** 4521
192. 1324 **193.** Rs. 4 **194.** A – 35, B – 28, C – 20
195. 12 **196.** 52 **197.** 30, 60, 90.
198. Both the numbers are divisible by 11.
199. All the three number are divisible by 4. **200.** 5652.

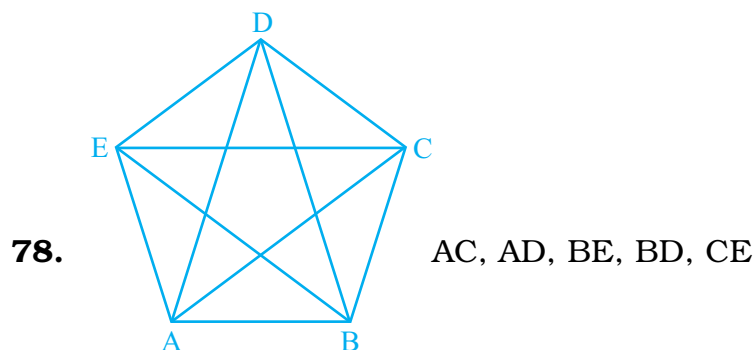
Unit 2

- 1.** (A) **2.** (D) **3.** (B) **4.** (B) **5.** (B) **6.** (B)
7. (B) **8.** (D) **9.** (C) **10.** (B) **11.** (D) **12.** (D)
13. (B) **14.** (C) **15.** (C) **16.** (B) **17.** Reflex angle
18. 9 **19.** Parallel **20.** O and S, T and N, M, P, Q, R
21. (a) BD (b) CD (c) C (d) D (e) 4
22. (a) Right (b) acute (c) obtuse
23. 5, $\triangle AOB$, $\triangle AOC$, $\triangle ACD$, $\triangle COD$, $\triangle ABC$
24. 12; $\angle OAB$, $\angle OBA$, $\angle OAC$, $\angle OCA$, $\angle OCD$, $\angle ODC$, $\angle AOB$, $\angle AOC$, $\angle COD$,
 $\angle DOB$, $\angle BAC$, $\angle ACD$ **25.** Four **26.** Two, Four
27. Two, **28.** One **29.** Three **30.** Four **31.** Ray AB
32. T **33.** F **34.** F **35.** T **36.** F **37.** T
38. F **39.** F **40.** F **41.** F
42. AB, AC, AD, AE, BC, BD, BE, CD, CE, DE
43. AB, BC, CD, DE, EA **44.** X, Z, Y
45. Vertices – A, B, C, D and E; line segments –
 AB, AC, AD, AE, BC, CD, DE
46. $\angle EAD$, $\angle AEF$, $\angle EFD$, $\angle ADF$, $\angle DFC$, $\angle DCF$,
 $\angle CDF$, $\angle BEF$, $\angle BFE$, $\angle EBF$,
 $\angle FBC$, $\angle FCB$, $\angle BFC$, $\angle ABC$, $\angle ACB$

- 47.** (a) $\angle CBD$, (b) $\angle DBE$, (c) $\angle EBA$, (d) $\angle CBE$, (e) $\angle DBA$, (f) $\angle CBA$,
(g) $\angle DBA$
- 48.** (i) A, B, C, AB, BC, AC (ii) A, B, C, D, AB, BC, CD, DA
(iii) A, B, C, D, E, AB, BC, CD, DE, EA
(iv) A, B, C, D, E, F, AB, CD, EF
- 49.** (ii) O, OA and OB (iii) D, DC and DB
- 50.** (a) No (b) No **51.** Yes **52.** Yes
- 54.** Yes points B and C lie in the interior of $\angle 2$ also.
- 55.** (b) and (c) **56.** (a) (ii) (b) (ii) and (iii) (c) (iii) (d) (i)
- 57.** Both figures have 3 line segments. No. It is not a closed figure
- 58.** No **59.** (a) $\angle AEB$, $\angle ADE$, $\angle BAE$, $\angle BCE$ (b) $\angle BCD$, $\angle BAD$
- 60.** (a) Yes (b) No (c) No.
- 61.** (a) AC (b) AE (c) ED (d) BE
- 62.** (a) $\angle ABD$ (b) $\angle RTS$ (c) $\angle ACD$ and $\angle ACB$
(d) $\angle RTW$ and $\angle RTS$ (e) $\angle AED$, $\angle AEB$, $\angle BEC$ and $\angle DEC$
(f) $\angle AEC$ (g) $\angle ACD$ (h) $\angle AKO$, $\angle AKP$, $\angle BKO$, $\angle BKP$
- 63.** (a) $\angle ADB = \angle CDB$ (b) $\angle ABD = \angle CBD$
(c) $\angle ADC = \angle BDC$, $\angle CAD = 90^\circ$, $\angle CBD = 90^\circ$
- 64.** Two, AC and AD **65.** Two **66.** One **67.** Three A, B, C
- 68.** Three, AB, BC, AC **69.** Four, A, B, C, D
- 70.** Six, AB, AC, AD, BC, BD, CD **71.** Five A, B, C, D, E
- 72.** Ten, AB, AD, AE, AC, BD, BE, BC, DE, DC, EC
- 73.** (a) CP and AB (b) OA, OB, OC, OP (c) CP



- 74.** (a) Yes. The sum of two acute angles may be less than a right angle.
 (b) Yes. The sum of two acute angles may be equal to a right angle.
 (c) Yes. The sum of two acute angles may be more than a right angle.
 (d) No. The sum of two acute angles is always less than 180° .
 (e) No. The sum of two acute angles is always less than 180° .
- 75.** (a) Yes. The sum of two obtuse angles is always greater than 180° .
 (b) No. The sum of two obtuse angles is always greater than 180° , but less than 360° .
- 76.** (a) Vertices A, B, C, D, E, F
 (b) Edges AB, AC, BC, BD, DF, FC, EF, ED, AE
 (c) Faces ABC, DEF, AEFC, AEDB, BDFC
- 77.** No edges, No faces and No vertices.



Unit 3

- | | | | | | |
|----------------|----------------|----------------|-----------------|------------------|----------------|
| 1. (B) | 2. (A) | 3. (C) | 4. (A) | 5. (D) | 6. (B) |
| 7. (D) | 8. (B) | 9. (B) | 10. (A) | 11. (A) | 12. (C) |
| 13. (B) | 14. (A) | 15. (D) | 16. (C) | 17. (B) | 18. F |
| 19. F | 20. F | 21. F | 22. T | 23. F | 24. T |
| 25. T | 26. T | 27. F | 28. F | 29. T | 30. T |
| 31. T | 32. T | 33. F | 34. F | 35. T | 36. T |
| 37. T | 38. F | 39. F | 40. Left | 41. Right | 42. -14 |

ANSWERS

- 43.** 1 **44.** 0 **45.** 9 **46.** -14 **47.** 30 **48.** -170
49. -5454 **50.** < **51.** > **52.** < **53.** < **54.** >
55. > **56.** = **57.** > **58.** >
59. (i) -(B) (ii) -(E) (iii) -(B) (iv) -(A) (v) -(B)
60. (a) -5 (b) -25 (c) 20 (d) -60 (e) -8 (f) -7 (g) 0 (h) 0
61. (a) +200 (b) -100 (c) +10 (d) 0
62. (a) Increase in size (b) Success (c) loss of Rs. 10
(d) 1000 B.C. (e) Fall in water level (f) 60 km North
(g) 10 m below the danger mark of river Ganga.
(h) 20 m above the danger mark of river Brahmaputra.
(i) Losing by a margin of 2000 votes.
(j) Withdrawing Rs 100 from the Bank. (k) 20°C fall in temperature.
63. 7°C **64.** 0 - 1 - 2 - 3 - 4 - 5 - 6 + 7 + 8 + 9 (One possible answer).
65. 0 **66.** 1 + 2 + 3 + 6 + (-2) + (-3) (One possible answer).
67. 2 **68.** -1 **69.** -2, -3 (any two negative integers can be taken).
70. 2, 0 (any two integers with one of them as 0).
71. (a), (b) and (c). The number on the right is greater.
72. 1 + 2 - 3 + 4 + 5 - 6 + 7 + 8 - 9 = 9
73. -5, -3, -2, 0, 1, 4 **74.** 0, -1, -3, -3, -4, -6 **75.** 0, 6
76. -140, -130, -120, -110, -101 (there can be many answers).
77. (1, 3), (0, 4), (-1, 5), (-2, 6) **78.** 72 **79.** 10
80. (a) Left (b) Right (c) Left **81.** (a) -1 (b) -1 (c) -4
82. 161 **83.** 1207

Unit 4

- 1.** (D) **2.** (B) **3.** (A) **4.** (B) **5.** (C) **6.** (C)
7. (B) **8.** (C) **9.** (A) **10.** (B) **11.** (C) **12.** (B)
13. (C) **14.** (B) **15.** (C) **16.** (C) **17.** (C) **18.** (D)

19. (B) 20. (A) 21. Whole 22. proper 23. like 24. mixed
25. improper 26. proper 27. like 28. unlike 29. $\frac{2}{5}$
30. $\frac{1}{2}$ 31. equivalent 32. $\frac{58}{7}$ 33. $12\frac{3}{7}$ 34. 9.26
35. $16\frac{1}{4}$ or $\frac{65}{4}$ 36. 0.28 37. $\frac{58}{9}$ 38. $\frac{43}{14}$ 39. 12 40. 8
41. 14.28 42. 6.08 43. Rs 25 44. 0.33 45. T 46. F
47. T 48. F 49. F 50. T 51. F 52. T
53. F 54. T 55. F 56. T 57. F 58. F
59. F 60. T 61. F 62. T 63. T 64. F
65. T 66. < 67. < 68. = 69. < 70. <
71. = 72. $\frac{7}{8}$ 73. $\frac{4}{15}$ 74. $\frac{1}{6}$
75. 12.104, 12.122, 12.142, 12.214, 12.401 76. 0.8531
77. 0.2345 78. 0.55 79. $\frac{20}{3}$ 80. 3.4 81. $\frac{41}{1000}$ 82. $6\frac{3}{100}$
83. 5.201kg 84. Rs 20.09, Rs $20\frac{9}{100}$ 85. 15.37 m, $\frac{1537}{100}$ m
86. 2.435km, $2\frac{87}{200}$ km 87. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{5}{6}$ 88. $\frac{7}{8}, \frac{6}{7}, \frac{4}{5}, \frac{3}{4}$ 89. $\frac{33}{44}$
90. $\frac{60}{72}$ 91. $16\frac{1}{8}$ 92. 20.8 93. 75.20 94. 28.0 95. $\frac{25}{24}$
96. $7\frac{1}{8}$ 97. $\frac{1}{3}$ 98. $2\frac{7}{9}$ 99. $5\frac{1}{4}$ 100. $7\frac{3}{4}$ 101. $15\frac{1}{4}$
102. 64 103. $\frac{889}{80}$ cm 104. $\frac{9}{10}$ 105. $\frac{3}{5}$ 106. $\frac{1}{6}$ 107. 24.5
108. 9.850kg 109. 0.011, 0.101, 0.110, 1.001 110. 22.022
111. (i) $\frac{11}{70}$ (ii) $\frac{1}{10}$ 112. Milk, Rice, $\frac{30}{53}$ 113. $\frac{2}{3}$ 114. $1\frac{3}{4}$ m

115. $47\frac{5}{8}$ kg **116.** $27\frac{1}{4}$ litres **117.** $2\frac{3}{4}$ litres **118.** $110\frac{1}{20}$ cm

119. $4\frac{5}{8}$ km **120.** $1\frac{1}{4}$ kg **121.** $2\frac{1}{4}$ m

122. (a) Equal denominators too have been added.

(b) Numerators and denominators have been added.

123. 2.6 metres **124.** (i) (D) (ii) (A) (iii) (E) (iv) (B) **125.** $\frac{5}{6}, \frac{6}{6}$

126. $\frac{3}{7}, \frac{4}{7}, \frac{7}{7}$ **127.** $\frac{9}{22}$ and $\frac{5}{22}$ **128.** $\frac{1}{2}$

129. (i) Bag I (ii) Bag II (iii) Bag III (iv) Bag I (v) Bag I (vi) Bag I

(vii) Bag II (viii) Bag I (ix) Bag I (x) Bag I

Unit 5

1. (D) **2.** (D) **3.** (D) **4.** (D) **5.** (C) **6.** F

7. F **8.** F **9.** T **10.** F **11.** T **12.** F

13. T **14.** data **15.** tally **16.** pictograph **17.** bars

18. uniform, equal **19.**  **20.** 60 **21.** 60, 7.5

22.

Grades	Tally marks
A	
B	
C	
D	
E	

23.

Number of two wheelers	Tally marks
0	
1	
2	
3	
4	

19 Families

24.

Lengths in cm	Tally marks	Number of carrots
15		5
18		6
20		9
21		6
22		4

(a) 10 (b) 20, 22

25.

Responses	Tally Marks	Number of Responses
Doctor		10
Engineer		6
Pilot		8
Officer		6

26. (a)

Games	Tally marks	Number of Students
Football		13
Cricket		9
Kho-Kho		6
Hockey		8
Tennis		4

(b) Football (c) Tennis.

27. Shirt size 32 : 5, Shirt size 34 : |||||, Shirt size 36 : 7

Shirt size 38 : ||||, Shirt size 40 : |||||

28. (a) 400 (b) Patel (c) Saikia (d) Rao, Roy **29.** (a) Metal (b) Glass

(c) Rubber (d) 160 **30.** (a) X (b) VIII (c) 40 (d) VI (e) 160

31. (a) Hindi (b) 175 (c) 425

32. (a) 6000sqkm (b) Raigarh and Jashpur (c) Four

33.

Day	Bottles  = 50 bottles
Sunday	      
Monday	   
Tuesday	     
Wednesday	    
Thursday	 
Friday	  

34.

Language	News paper  = 1000 news papers
English	    
Hindi	        
Tamil	
Punjabi	  
Gujarati	 

- 36.** (a) LPG (b) 10 (c) 5000 **37.** (a) 1300 (b) 300 (c) 4, 5, 6, 7, 8
 (d) 7 (e) 8 (f) False **38.** (a) 295 (b) Delhi (c) Chennai
 (d) Patna, Jaipur, Delhi, Guwahati (e) 50
- 39.** (a) N.H. 2 (b) N.H. 10 (c) 900km (d) N.H. 8 **40.** (a) 1000
 (b) Marathi, Bengali (c) 800
- 41.** (a) Number of students in different Academic years. (b) 2005 – 06
 (c) 2004 – 05 (d) 2003 – 04 (e) 2004 – 05

Unit 6

1. (D) 2. (B) 3. (A) 4. (A) 5. (D) 6. (B)
7. (A) – (iv), (B) – (i), (C) – (ii), (D) – (iii)
8. (A) – (iii), (B) – (iii), (C) – (ii), (D) – (i)
9. BM + MD + DE + EN + NG + GH 10. Area. 11. 16sq cm
12. (a) 12sq units (b) 16sq units 13. (a) 100 (b) 1 (c) 1, 100
(d) 10000 14. T 15. F 16. F 17. T 18. F
19. F 20. T 21. 2cm 22. 14cm 23. 15cm, 5cm
24. 17m 25. 13sq units 26. 70m 27. 500m 28. 54cm
29. 44 Units 30. 2km 400m, 5 times 31. 400m 32. 80m
33. 308cm 34. 8cm, 10cm, 10cm; 8cm, 8cm, 12cm
35. 1cm × 19cm, 2cm × 18cm, 3cm × 17cm, 4cm × 16cm,
5cm × 15cm, 6cm × 14cm, 7cm × 13cm, 8cm × 12cm,
9cm × 11cm, 10cm × 10cm 36. 10cm 37. 20, 20m
38. 36sq m, 30m 39. 1340m, Rs 26800, Rs 400000
40. Rs 50 41. (a) 32 units (b) 60 units 42. 6300sq cm
43. 20cm, 280cm 44. Anmol's chart paper 45. 12, 240, 2880
46. 100 47. Square field 48. 40000sq m 49. 4 times
50. 84, 240cm² 51. Rs 5400 52. 126sq m, $\frac{1}{8}$, 1:7
53. 216sq cm 54. 56 cm 55. 212 56. 20m
57. 256sq m, (a) 128sq m, (b) 128sq m

58. (a) Dimensions in cm	Area in cm ²	Dimensions in cm	Area in cm ²
17 × 1	17	12 × 6	72
16 × 2	32	11 × 7	77
15 × 3	45	10 × 8	80
14 × 4	56	9 × 9	81
13 × 5	65		

(b)	Dimensions in cm	Perimeter in cm ²
	36×1	74
	18×2	40
	12×3	30
	9×4	26
	6×6	24

59. Area: (i) 11cm^2 (ii) 13cm^2 (iii) 13cm^2

Perimeter: (i) 18cm (ii) 28cm (iii) 28cm

60. 4sq cm, 34cm

Unit 7

- 1.** (B) **2.** (C) **3.** (A) **4.** (C) **5.** (B) **6.** (B)
7. (B) **8.** (A) **9.** (C) **10.** (C) **11.** (B) **12.** (A)
13. (C) **14.** (A) **15.** (A) **16.** (A) **17.** (C) **18.** (A)
19. (B) **20.** (A) **21.** (A) **22.** (A) **23.** (D) **24.** $40h$
25. $\frac{70}{p}$ **26.** $8d + 2$ **27.** 3 **28.** -9 **29.** $x = y + 7$
30. $3x + 8$ **31.** $\frac{x}{2}$ **32.** $7w$ **33.** $12x + 2000$
34. $10t + u$ **35.** p **36.** $100x$ **37.** $1000p$ **38.** $100x$ **39.** $n + 7$
40. $100 - f$ **41.** F **42.** T **43.** T **44.** F **45.** T
46. F **47.** T **48.** F **49.** T **50.** T **51.** T
52. F **53.** F **54.** F **55.** F **56.** $2x + 1$ **57.** $t - 20$
58. $n + 1$ **59.** $3m$ **60.** kn **61.** $x + 1$ **62.** $2n + 1$ and $2n + 3$
63. $2m$ and $2m + 2$ **64.** $5n$ **65.** $\frac{x}{x+1}$
66. $20y$, where y is height of Empire State Building. **67.** $2p + 3$
68. $13 - (-3)z (=13+3z)$ **69.** $10 + \frac{p}{11}$ **70.** $3x + 1$ **71.** $10 - 6q$
72. $3y + 4 = 10$, $2x - 3 = 1$ **73.** $2t + 3 = 3$ **74.** $x + 1 = 0$

- 75.** The cost of pen is 5 times the cost of a pencil.
- 76.** Amount left with Leela is Rs 10,000 more than the amount she contributed towards Prime Minister's Relief fund.
- 77.** Age of Kartik's Father is seven times the age of Kartik.
- 78.** The difference between maximum and minimum temperature on a day in Delhi was 10°C .
- 79.** Last year Jay planted 10 more plants than twice the number of plants planted by John.
- 80.** Sharad reduced the consumption of tea per day by 5 cups after having some health problem.
- 81.** The number of students dropping out this year is 30 less than the number of students dropped last year.
- 82.** The price of petrol per liter decreased this month by Rs 5 than its price last month.
- 83.** Khader's monthly salary increased by Rs 1000 in the year 2006 than in 2005.
- 84.** The number of girls enrolled this year was 10 less than 3 times the girls enrolled last year.
- 85.** (a) $2x - 13 = 3$ (b) $\frac{x}{5} = x - 5$ (c) $\frac{2x}{3} = 12$ (d) $2x + 9 = 13$ (e) $\frac{x}{3} - 1 = 1$
- 86.** (a) $p = 3a$ (b) $d = 2r$ (c) $s = c + p$ (d) $a = p + i$
- 87.** (i) $x - 2$ (ii) $x + 35$ (iii) $x + 32$ (iv) $8x$
- 88.**
- | | | | | | |
|----------|----|----|----|---|---|
| m | 0 | 1 | 2 | 3 | 4 |
| $2m - 5$ | -5 | -3 | -1 | 1 | 3 |
- Solution is $m = 2$
- 89.** $50p - 1800$ **90.** $8x + 100L$ **91.** $m \times m$ sq cm.
- 92.** The perimeter of a triangle is the sum of all its sides.
- 93.** The perimeter of a rectangle is twice the sum of its length and breadth.
- 94.** $(m + 40)\text{kg}$ **95.** (i) $2(r + t) + 10$ (ii) $15x$ (iii) $(8rt + 4000)\text{sq cm}$
(iv) Rs 23x

- 96.** (i) Sunita : $x + 4$, Geeta : $2x + 4$, where x is the present age (in years) of Sunita. (ii) Sunita : $x - 3$, Geeta : $2x - 3$
- 97.** (i) – (B), (ii) – (E), (iii) – (C), (iv) – (C), (v) – (A)

Unit 8

- 1.** (A) **2.** (D) **3.** (D) **4.** (A) **5.** (C) **6.** (D)
- 7.** (C) **8.** (D) **9.** (A) **10.** (C) **11.** 12 **12.** 4
- 13.** 10 **14.** 18, 60 **15.** 28, 81, 52 **16.** T **17.** T **18.** F
- 19.** F **20.** F **21.** T **22.** F **23.** T **24.** T
- 25.** T **26.** F **27.** T **28.** F **29.** F **30.** T
- 31.** F **32.** T **33.** F **34.** F **35.** division
- 36.** 28 **37.** 18 **38.** proportion **39.** 3 : 7 **40.** 1 : 6
- 41.** 3 : 1 **42.** one **43.** same **44.** 100 paise OR 1 Rupee
- 45.** 149 : 160 **46.** 100gm **47.** 4 : 5 **48.** (i) and (ii)
- 49.** 10 : 21 **50.** 14kg **51.** 16cm and 40cm **52.** 5 : 8 **53.** 933
- 54.** (a) 15 : 1 (b) 1 : 14 **55.** (a) 7 : 16 (b) 9 : 16
- 56.** (a) 7 : 11 (b) 7 : 18 (c) 11 : 18 **57.** 7 : 40 **58.** 2 : 3 **59.** 1 : 17
- 60.** 18 m **61.** $4\frac{2}{3}$ cups **62.** 15 **63.** (a) 9 : 4 (b) 4 : 13
- 64.** (a) 4 : 1 (b) 1 : 3 **65.** 65 North Indian and 52 South Indian foodstalls.
- 66.** 23 : 47 **67.** 12 hours **68.** Yes **69.** (a) 13 : 5 (b) 2 : 11 (c) 13 : 35
- 70.** 54kg and 30kg **71.** $4\frac{1}{2}$ kg **72.** (i) 2 : 5 (ii) 2 : 1 (iii) 1 : 2 (iv) 2 : 5 **73.** 36 and 64 **74.** 1 : 2, 1 : 2 **75.** 3 : 1
- 76.** (a) 5 : 9 (b) 3 : 10 **77.** (a) 5 : 8 (b) 8 : 7 (c) 13 : 7
- 78.** 400km **79.** (a) Rs 36000 (b) 14 months. **80.** 12 hectares
- 81.** 30° **82.** Rs 51 **83.** Rs 1260 **84.** 14810 **85.** 19.76kg
- 86.** 3 cups **87.** 540 **88.** 1 : 5 **89.** 3 : 5

Unit 9

1. (B) 2. (A) 3. (D) 4. (C) 5. (A) 6. (B)
7. (D) 8. (B) 9. (B) 10. (C) 11. (C) 12. (B)
13. (A) 14. (B) 15. (B) 16. (A) 17. (D) 18. same
19. one 20. equal 21. unequal 22. Line segment, 5cm
23. Angle, 80° 24. l 25. equal 26. 5 27. right, triangle
28. 0, 8 29. 3 30. 7 (1, 2, 4, 5, 6, 7, 9)
31. 7 (A, M, U, V, W, Y, T) 32. 5 (B, C, D, E, K) 33. 4 (H, I, O, X)
34. 10 (F, G, J, L, N, P, Q, R, S, Z) 35. perpendicular 36. 6
37. n 38. one 39. no 40. one 41. diagonals
42. mid points 43. T 44. F 45. T 46. F
47. T 48. T 49. T 50. F 51. T 52. F
53. T 54. T 55. F 56. F 57. T 58. F
59. F 60. T 61. F 62. Yes, One line of symmetry.
63. AC, BD 64. H, I, O, X 65. S
66. S (Zero), Y (One), M (One), E (One), T (One), R (Zero)
67. (i) $\rightarrow$ (f), (ii) $\rightarrow$ (c), (iii) $\rightarrow$ (f), (iv) $\rightarrow$ (d), (v) $\rightarrow$ (e), (vi) $\rightarrow$ (a), (vii) $\rightarrow$ (g)
68. (i) 2, (ii) 1, (iii) 0, (iv) 1, (v) 1 (vi) 0
69. Yes 70. (a) Yes, (b) Yes, (c) Yes, (d) Yes 72. Yes, Yes, Yes
73. Yes 80. One 81. One 82. Yes

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