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**TOUCHPAD**

# Mathematics

Ver. 1.0 >

## Answer Key

# ANSWERS

## Chapter 1: Large Numbers

### Warm Up

1. Jaipur      2. 9,420, 2,049      3.  $90,162 = 90,000 + 100 + 60 + 2$   
 4. Bengaluru - 11,000, Delhi - 7,000, Mumbai - 5,000, Jaipur - 4,000, Chennai - 3,000

### Exercise 1A

1. a. 8,34,949      b. 40,70,698      c. 66,24,411      d. 63,00,407

2.

	TL	L	TTh	Th	H	T	O
a.			3	8	9	6	2
b.		3	5	6	2	4	8
c.		7	2	8	0	4	5
d.	2	6	3	4	2	6	1
e.	7	3	2	6	4	3	1

3. a. 6,85,447; Six lakh eighty-five thousand four hundred forty-seven  
 b. 98,76,560; Ninety-eight lakh seventy-six thousand five hundred sixty  
 c. 6,00,780; Six lakh seven hundred eighty  
 d. 76,54,321; Seventy-six lakh fifty-four thousand three hundred twenty-one  
 e. 7,00,529; Seven lakh five hundred twenty-nine  
 f. 99,93,427; Ninety-nine lakh ninety-three thousand four hundred twenty-seven
4. 814010 ones, 81401 tens, 8140 hundreds, 814 thousands, 81 ten thousands, 8 lakhs
6. a. 358, 469, 580, 691, 802, 913, 1,024  
 b. 4,050, 5,100, 6,150, 7,200, 8,250, 9,300, 10,350  
 c. 5,504, 6,404, 7,304, 8,204, 9,104, 10,004, 10,904  
 d. 10,105, 10,125, 10,145, 10,165, 10,185, 10,205, 10,225  
 e. 98,335, 98,435, 98,535, 98,635, 98,735, 98,835, 98,935  
 f. 11,789, 11,791, 11,793, 11,795, 11,797, 11,799, 11,801  
 g. 82,350, 83,350, 84,350, 85,350, 86,350, 87,350, 88,350
7. a. 834      b. 166      c. 365

### Exercise 1B

1. a. 5,000      b. 20,000      c. 0      d. 3,000  
 e. 9,00,000      f. 6,00,000
2. 6,99,930      3. 6,06,000
4. a.  $8,00,000 + 50,000 + 6,000 + 400 + 30 + 1$   
 b.  $70,000 + 8,000 + 900 + 80 + 7$   
 c.  $70,00,000 + 6,00,000 + 90,000 + 8,000 + 700 + 60 + 5$   
 d.  $6,00,000 + 70,000 + 8,000 + 900 + 80 + 7$   
 e.  $80,00,000 + 6,00,000 + 20,000 + 5,000 + 900$   
 f.  $9,00,000 + 50,000 + 6,000 + 2$
5. a. 70,56,052      b. 80,74,505      c. 80,59,303      d. 69,08,072  
 e. 34,05,009
6. 3,05,678, 8,76,530      7. 10,35,789, 98,75,310
8. a. 77,74,320, 20,00,347      b. 99,99,865, 55,55,689  
 c. 77,77,420, 20,00,047      d. 99,99,953, 33,33,359
9. a. 13,590      b. 50,193
10. a. 45,687      b. 84,657

### Exercise 1C

1. a. >      b. <      c. <      d. >  
 e. =      f. >

2. a. 732, 8,63,532, 78,25,216, 86,54,627  
 b. 5,23,176, 20,00,413, 20,50,009, 25,00,496  
 c. 69,545, 6,95,454, 69,54,521, 69,54,530,  
 d. 7,54,654, 75,46,321, 75,46,325, 75,46,452
3. a. 9,74,792, 87,976, 76,049, 75,959  
 b. 5,28,781, 4,53,170, 4,52,678, 65,467  
 c. 94,00,045, 79,83,678, 79,83,667, 78,93,569  
 d. 98,64,542, 98,64,531, 98,64,521, 9,86,421

### Exercise 1D

1. a. 90      b. 350      c. 970      d. 3240  
 e. 5,050      f. 9,870      g. 78,740      h. 4,08,380
2. a. 300      b. 500      c. 4,700      d. 9,900  
 e. 17,200      f. 28,800      g. 1,20,100      h. 3,18,600
3. a. 8,000      b. 10,000      c. 2,08,000      d. 27,000  
 e. 3,19,000      f. 99,000      g. 10,36,000      h. 28,67,000
4. a. i. 12,670      ii. 12,700      iii. 13,000  
 b. i. 17,650      ii. 17,600      iii. 18,000  
 c. i. 15,890      ii. 15,900      iii. 16,000  
 d. i. 31,980      ii. 32,000      iii. 32,000  
 e. i. 3,47,130      ii. 3,47,100      iii. 3,47,000  
 f. i. 1,58,360      ii. 1,58,400      iii. 1,58,000  
 g. i. 5,62,780      ii. 5,62,800      iii. 5,63,000  
 h. i. 16,70,250      ii. 16,70,200      iii. 16,70,000

5.

	Number	Nearest 10	Nearest 100	Nearest 1000
a.	73,248	73250	73200	73,000
b.	34,097	34,100	34,100	34,000
c.	1,05,789	1,05,790	1,05,800	1,06,000
d.	27,903	27,900	27,900	28,000
e.	1,28,991	1,28,990	1,29,000	1,29,000

6. 6999
7. a. 1,125, 1,132      b. 25,652, 25,735      c. 12,549, 13,499  
 (Answer may vary)

### Learning Logs

1. a. 4      b. 5      c. 0  
 d. 9,99,999; 1,00,000      e. 33,000
2. a. True      b. False      c. False      d. False
3. a. Eighty-three lakh seventy thousand seven hundred ninety-four  
 b. Seven lakh fifty-seven thousand three hundred twenty-five  
 c. Eighty-seven lakh twenty-nine thousand five hundred thirty-six  
 d. Two lakh two thousand twenty  
 e. Eight lakh ninety-nine thousand nine hundred seventy-seven  
 f. Eighty lakh nineteen thousand five hundred twenty-seven
4. a. 69,30,719      b. 19,09,990      c. 6,07,104      d. 7,19,116
5. a. Ones, 40, 4      b. Lakhs, 4,00,000, 4  
 c. Ones, 0, 0
6. a. >      b. <      c. >      d. =
7. a. 6,27,909, 6,27,910, 52,79,054, 62,79,056, 63,79,056  
 b. 2,13,500, 9,98,756, 9,98,765, 23,14,992, 75,46,786, 75,64,890
8. a. 10,19,923, 10,06,165, 2,63,792, 2,05,479, 1,50,358  
 b. 27,89,988, 2,13,450, 3,07,689, 2,96,545, 1,29,657

9. a. 3,04,678, 8,76,430      b. 10,35,689, 98,65,310  
 10. a. 1,02,345      b. 9,87,654  
 11. a. 10,00,002      b. 99,99,987

12.

Number	Rounded off to the		
	Nearest 10	Nearest 100	Nearest 1000
a. 5,83,320	5,83,320	5,83,300	5,83,000
b. 16,09,329	16,09,330	16,09,300	16,09,000
c. 2,89,536	2,89,540	2,89,500	2,90,000
d. 4,01,289	4,01,290	4,01,300	4,01,000

### Mental Maths

1. c      2. c      3. a      4. c

### HOTS

9,76,503

## Chapter 2: Mathematical Operations

### Warm Up

1.  $18426 + 14255 + 13704 = 46385$       2.  $14234 + 13430 = 27664$   
 3.  $18426 - 14255 = 4171$   
 4. a.  $49 \times 100 = 4900$       b.  $96 \times 50 = 4800$   
 5. a.  $2500 \div 100 = 25$       b.  $4650 \div 50 = 93$

### Exercise 2A

1. a. 465      b. 630      c. 1008      d. 3506      e. 180  
 2. a. 26458      b. 436483      c. 0      d. 0  
 3. a. 766643      b. 1753083      c. 955541      d. 8659024  
 e. 762694      f. 1647505  
 4. a. 101858      b. 437989      c. 516706      d. 1421790      e. 302354      f. 395131  
 5. a.

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 5 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 7 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 9 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 7 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 8 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 5 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{+} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{+} 8 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ + \phantom{0} 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

6. a. 1045273 bicycles      b. 120467 students  
 c. 279214 people      d. 326470 copies  
 e. 153903 letters  
 7. a. 5205 and 4840      b. 6220 and 8455  
 c. 7095 and 4840      d. 8455 and 4840  
 e. 5205 and 8455  
 8. a. 1490 km      b. 1618 km      c. Mumbai and Hyderabad

### Exercise 2B

1. a. 858267      b. 120626      c. 532248      d. 7244065  
 e. 1256702      f. 24928  
 2. a. 73072      b. 470005      c. 542763      d. 277165  
 e. 76484      f. 41636

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 5 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 1 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 5 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 6 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 4 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 2 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

$$\begin{array}{r} \phantom{-} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \phantom{-} 8 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ - \phantom{0} 5 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \\ \hline 3 \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \phantom{0} \end{array}$$

4. a. 227331      b. 409527      c. 540360      d. 435660  
 5. a.  $310 - 184 = 126$ ,  $310 - 126 = 184$       b.  $257 + 527 = 784$ ,  $784 - 257 = 517$   
 6. a. 440      b. 6789  
 7. a. 857025  
 c. Anil, ₹2,03,310  
 e. 65769 bricks  
 8. Yes, ₹1,622  
 10. a. 3206 metres

### Exercise 2C

1. a. even      b. even      c. Odd      d. Odd  
 i. a. even      b. even      c. Odd      d. Odd  
 ii. a. Odd      b. Odd      c. even      d. even  
 2. b. 2348      c. 4014      e. 846  
 3. b. 6893      c. 1027      e. 981  
 4. 101, 111, 121, 131, 141, 151, 161, 171, 181, 191  
 5. 1001, 1111, 1221, 1331, 1441  
 6. 23032, 23132, 23232, 23332, 23432, 23532, 23632, 23732, 23832, 23932,  
 24142, 24,042, 24242, 24342, 24442, 24542, 24642, 24742, 24842, 24942

### Exercise 2D

1. a. 45144      b. 65142      c. 153306      d. 209872  
 e. 92664      f. 70992      g. 661232      h. 2290260  
 i. 460530  
 2. a. 570      b. 80800      c. 56400      d. 86430  
 e. 276300      f. 5090000  
 3. a. 80      b. 0      c.  $100 \times 5$       d. 9134  
 e. 500, 16      f. 708, 55, 25  
 4. a. 896      b. 3588      c. 9936      d. 13020  
 5. a. 72      b. 180      c. 11800      d. 28100  
 e. 272      f. 1020      g. 21780      h. 2800  
 6. a. 276      b. 1404      c. 10856      d. 10116  
 e. 288      f. 11832      g. 42079      h. 11544  
 7. a. 27500      b. 1950      c. 243000      d. 40000  
 e. 436500      f. 336400      g. 4368000      h. 666600  
 i. 401000  
 8. a. 800      b. 864      c. 806      d. 754  
 e. 858  
 9. a. ₹19,38,000      b. 457500 L      c. 675000 toys      d. ₹4,95,300  
 e. 8760 hours      f. 38998 L, ₹23,00,882



**Exercise 2E**

1. c.  $\begin{array}{c} 48 \\ \triangle \\ 6 \times 8 \end{array}$  d.  $\begin{array}{c} 36 \\ \triangle \\ 6 \times 6 \end{array}$  e.  $\begin{array}{c} 56 \\ \triangle \\ 7 \times 8 \end{array}$  f.  $\begin{array}{c} 84 \\ \triangle \\ 21 \times 4 \end{array}$

g.  $\begin{array}{c} 28 \\ \triangle \\ 56 \div 2 \end{array}$  h.  $\begin{array}{c} 32 \\ \triangle \\ 128 \div 4 \end{array}$  i.  $\begin{array}{c} 54 \\ \triangle \\ 162 \div 3 \end{array}$  j.  $\begin{array}{c} 14 \\ \triangle \\ 56 \div 4 \end{array}$

k.  $\begin{array}{c} 12 \\ \triangle \\ 96 \div 8 \end{array}$  l.  $\begin{array}{c} 4 \\ \triangle \\ 32 \div 8 \end{array}$  (Answer may vary)

2. a. 7      b. 8      c. 16      d. 39  
 e. 101      f. 199      g. 31      h. 201
3. a. Q = 29, R = 13      b. Q = 13, R = 17  
 c. Q = 254, R = 0      d. Q = 334, R = 0  
 e. Q = 70, R = 32      f. Q = 306, R = 13
4. a. Q = 637, R = 3      b. Q = 12521, R = 1  
 c. Q = 192673, R = 3      d. Q = 1149, R = 9  
 e. Q = 6461, R = 51      f. Q = 42, R = 28  
 g. Q = 458, R = 68      h. Q = 249, R = 166
5. a. 10231      b. 323128  
 6. a. 1      b. 1      c. 6574      d. 0  
 e. 4032, 24  
 7. a. iii      b. i      c. v      d. vi  
 e. ii      f. iv  
 8. a. ₹226      b. 882 boxes      c. 403      d. ₹2,304  
 e. 737 L  
 9. a. 431 kg      b. i. 48 km      ii. 58 km      c. 30

**Exercise 2F**

1. 23      2. 75      3. 16      4. 3704  
 5. 1385      6. 5      7. 21      8. 44  
 9. 333      10. 20      11. 67      12. 29

**Learning Logs**

1. a. 63328      b. 1119294      c. 1343012      d. 963436  
 e. 634867
2. a. 879953      b. 369923      c. 167200      d. 276387  
 e. 422272      f. 726302
3. a. 707364      b. 221408      c. 774567      d. 903905
4. a. 1021176      b. 614080      c. 5549838
5. a. 554228      b. 643800      c. 339456
6. a. 390      b. 300      c. 980
7. a. 414      b. 575      c. 1440
8. a. Q = 3104, R = 4      b. Q = 895, R = 51  
 c. Q = 2611, R = 4      d. Q = 430, R = 16  
 e. Q = 379, R = 45      f. Q = 680, R = 0
9. 240885      10. 619321      11. ₹6,44,400  
 12. 9989001      13. 248 km      14. 58 pages
15. a. 137      b. 10107  
 16. c. 528      d. 528      e. 132      f. 66

**Mental Maths**

1. c      2. d      3. b      4. c      5. b      6. c      7. a  
 8. d      9. c      10. c

**HOTS**

1. a.  $\begin{array}{r} 30114 \\ - 963648 \\ \hline 036 \\ - 32 \\ \hline 44 \\ - 32 \\ \hline 128 \\ - 128 \\ \hline 0 \end{array}$  b.  $\begin{array}{r} 2797 \\ - 248 \\ \hline 988 \\ - 868 \\ \hline 1209 \\ - 1116 \\ \hline 936 \\ - 868 \\ \hline 68 \end{array}$

2. Nikhil

3. a. ÷      b. +      c. +      d. -

**Fun Activity**

1.  $\begin{array}{c} 8 \\ \triangle \\ 7 \\ \triangle \\ 1 \end{array} + \begin{array}{c} 4 \\ \triangle \\ 3 \\ \triangle \\ 5 \end{array} = \begin{array}{c} 2 \\ \triangle \\ 6 \\ \triangle \\ 6 \end{array}$  (Answer may vary)

**Chapter 3: Multiples and Factors**

**Warm Up**

1. Bihar      2. Uttar Pradesh  
 3. Maharashtra      4. Rajasthan  
 5. Uttarakhand      6. Tamil Nadu

**Exercise 3A**

1. a. 13, 26, 39, 52, 65      b. 18, 36, 54, 72, 90  
 c. 24, 48, 72, 96, 120      d. 75, 150, 225, 300, 375  
 e. 115, 230, 345, 460, 575
2. a. 1000      b. 380      c. 1200      d. 6, 12, 18, 24, 30  
 e. 11, 33, 55, 77, 99
3. a. 19, 38, 57, 76, 95, 114, 133, 152, 171, 190  
 b. 105, 120, 135, 150, 165, 180, 195, 210  
 c. 153      d. 25, 50, 75
4. a. No      b. Yes      c. Yes      d. Yes
5. a. 1, 2, 4, 7, 14, 28      b. 1, 2, 4, 5, 8, 10, 20, 40  
 c. 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72  
 d. 1, 2, 3, 6, 9, 18, 27, 54  
 e. 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30, 40, 60, 120
6. a. 1, 3, 5, 9, 15, 45      b. 1, 3, 9, 27, 81  
 c. 1, 2, 4, 31, 62, 124  
 d. 1, 2, 4, 5, 8, 10, 20, 25, 40, 50, 100, 200  
 e. 1, 3, 5, 15, 23, 69, 115, 345
7. a. number itself      b. 1      c. 0  
 d. 1      e. 2
8. a. No      b. Yes      c. Yes      d. No

**Exercise 3B**

1. a. common factor      b. common multiple  
 c. 6      d. common factor  
 e. Common factor
2. a. T      b. F      c. T      d. F  
 e. F
3. a. 15, 30, 45      b. 12, 24, 36      c. 18, 36, 54      d. 24, 48, 72  
 e. 16, 32, 48      f. 36, 72, 108      g. 6, 12, 18      h. 40, 80, 120

Answer may vary



4. a. 6, 12, 18, 24, 30, 36, 42, 48, 54, 60, 66  
 b. 7, 14, 21, 28, 35, 42, 49, 56, 63, 70  
 c. No d. 42 e. Milo  
 f. 1, 2, 5, 7, 10, 14, 35, 70
5. 12, 24 and 30
6. a. 1, 3 b. 1, 3 c. 1, 3 d. 1, 3  
 e. 1, 5 f. 1, 2, 3, 4, 6, 12
7. 30 seconds

**Exercise 3C**

1.

	Number	Divisible by					Number	Divisible by			
		2	3	5	10			2	3	5	10
a.	84	✓	✓	✗	✗	f.	120	✓	✓	✓	✓
b.	90	✓	✓	✓	✓	g.	840	✓	✓	✓	✓
c.	486	✓	✓	✗	✗	h.	585	✗	✓	✓	✗
d.	590	✓	✗	✓	✓	i.	670	✓	✗	✓	✓
e.	274	✓	✗	✗	✗	j.	1420	✓	✗	✓	✓

2. a, d, e, f      3. b, d, e, f      4. a, e, f      5. a, b, e, f

**Exercise 3D**

1. a. 1, 7  
 c. 1, 3, 7, 21
2. a. 3      b. 4  
 c. 10      d. 2
3. a. 5      b. 11  
 e. 9      f. 9  
 i. 15      j. 14  
 g. 10      h. 8  
 k. 25      l. 7
4. a. 6      b. 16  
 e. 7      f. 6  
 i. 1      j. 14  
 c. 30      d. 2  
 g. 14      h. 18  
 k. 16      l. 36

**Exercise 3E**

1. a. 30, 60, 90, 120, ...  
 c. 63, 126, 189, ...  
 e. 180, 360, 540, 720, ...
2. a. 16      b. 6      c. 18      d. 30
3. a. 72      b. 72      c. 60      d. 48  
 e. 72      f. 75      g. 60      h. 300  
 i. 160      j. 66      k. 120      l. 240

**Exercise 3F**

1. a. 105      b. 726      c. 9      d. 2400  
 2. 40      3. 30      4. 90      5. 15

**Learning Logs**

1. a. 35      b. 108      c. 108      2. 60 and 72
3. a. 1, 2, 13, 26      b. 1, 2, 3, 4, 6, 9, 12, 18, 36  
 c. 1, 2, 3, 5, 6, 9, 10, 15, 18, 30, 45, 90  
 d. 1, 2, 3, 4, 5, 6, 8, 10, 12, 15, 20, 24, 30, 40, 60, 120
4. a. 20, 40      b. 36, 72      c. 60, 120
5. a. 1, 2, 5, 10      b. 1, 2, 3, 4, 6, 12      c. 1, 2, 3, 6
6. a. HCF = 15, LCM = 90      b. HCF = 6, LCM = 36  
 c. HCF = 7, LCM = 420      7. 15      8. 4 L
9. 28      10. 6

**Mental Maths**

1. d      2. a      3. b      4. a  
 5. b      6. d      7. d

**HOTS**

1. 60 stones      2. a. 8 teams      b. 5 girls and 4 boys

**Chapter 4: Fractions**

**Warm Up**

1. a.  $\frac{25}{100}$       b.  $\frac{45}{100}$       c.  $\frac{2}{10}$       d.  $\frac{60}{100}$   
 e.  $\frac{8}{10}$       f.  $\frac{6}{10}$
2. Either tray e or f.      3. 75 tomatoes

**Exercise 4A**

1. a.  $\frac{5}{12}$       b. Numerator = 5, Denominator = 12
2.  $\frac{1}{9}, \frac{1}{6}, \frac{1}{7}, \frac{1}{10}$       3. a, c and d      4. a and c
5. Proper fractions a, c and d; Improper fractions b and e

6. a.  $\frac{35}{8}$       b.  $\frac{14}{3}$       c.  $\frac{12}{11}$       d.  $\frac{38}{7}$       e.  $\frac{125}{8}$
7. a.  $3\frac{3}{4}$       b.  $4\frac{2}{4}$       c.  $3\frac{4}{5}$       d.  $3\frac{2}{8}$       e.  $5\frac{2}{6}$
8. a. 13      b. 8      c. 5, 5      d. 2      e. 4  
 f. 81

**Exercise 4B**

1. a.  $\frac{2}{10}, \frac{3}{15}, \frac{4}{20}, \frac{5}{25}, \frac{6}{30}$       b.  $\frac{2}{8}, \frac{3}{12}, \frac{4}{16}, \frac{5}{20}, \frac{6}{24}$   
 c.  $\frac{4}{14}, \frac{6}{21}, \frac{8}{28}, \frac{10}{35}, \frac{12}{42}$       d.  $\frac{16}{22}, \frac{24}{33}, \frac{32}{44}, \frac{40}{55}, \frac{48}{66}$   
 e.  $\frac{4}{10}, \frac{6}{15}, \frac{8}{20}, \frac{10}{25}, \frac{12}{30}$  (Answer may vary)
2. a. 8, 20      b. 8      c. 15      d. 28  
 e. 6, 4, 2      f. 5, 15, 1      g. 6, 20, 5
3. a. No      b. Yes      c. Yes      d. Yes  
 e. Yes      f. Yes      g. No      h. No
4. a.  $\frac{20}{28}$       b.  $\frac{25}{35}$       c.  $\frac{35}{49}$       5. 2
6. a. 2      b. 4
7. a. 6      b. 4      c. 3      d. 2
8. b. =      c. ≠      d. =      e. =      f. =
9.  $\frac{2}{4}, \frac{3}{6}$

**Exercise 4C**

1. a.  $\frac{2}{3}$       b.  $\frac{1}{4}$       c.  $\frac{4}{5}$       d.  $\frac{1}{4}$       e.  $\frac{4}{7}$       f.  $18, \frac{2}{3}$
2. a.  $\frac{1}{3}$       b.  $\frac{3}{4}$       c.  $\frac{4}{5}$       d.  $\frac{5}{4}$       e.  $\frac{8}{17}$       f.  $\frac{5}{13}$   
 g.  $\frac{2}{5}$       h.  $\frac{4}{5}$       i.  $\frac{1}{3}$       j.  $\frac{2}{5}$
3. a.  $\frac{4}{5}$       b.  $\frac{9}{8}$       c.  $\frac{2}{5}$       d.  $4\frac{1}{8}$       e.  $3\frac{3}{11}$       f.  $3\frac{1}{3}$



4. a.  $\frac{3}{7}$     b.  $\frac{3}{11}$     c.  $\frac{5}{12}$     d.  $\frac{3}{10}$   
 5. a. <    b. >    c. <    d. >    e. <    f. >  
 g. <    h. =  
 6. a.  $\frac{4}{5}, \frac{2}{5}, \frac{9}{5}, \frac{15}{5}$     b.  $\frac{44}{25}, \frac{20}{25}, \frac{65}{25}, \frac{6}{25}$   
 7. a.  $\frac{5}{3}, \frac{5}{6}, \frac{5}{9}, \frac{5}{27}$     b.  $\frac{25}{24}, \frac{17}{24}, \frac{7}{24}, \frac{5}{24}$     8. Baba

#### Exercise 4D

1. a.  $\frac{5}{15}$     b.  $\frac{3}{8}$     c.  $\frac{9}{9}$     d.  $\frac{6}{12}$     e.  $\frac{6}{14}$     f.  $\frac{5}{5}$   
 2. a.  $\frac{1}{7}$     b.  $\frac{4}{10}$     c.  $\frac{36}{12}$     d.  $\frac{9}{9}$     e.  $\frac{14}{25}$     f.  $\frac{14}{11}$   
 3. a.  $3\frac{2}{3}$     b.  $2\frac{1}{2}$     c.  $1\frac{1}{3}$     d. 10  
 4.  $\frac{2}{8}$  L    5.  $7\frac{3}{4}$  cm    6.  $20\frac{1}{2}$  metres    7.  $4\frac{1}{2}$  kg

#### Learning Logs

1. a.  $\frac{18}{5}$     b.  $\frac{19}{7}$     c.  $\frac{20}{3}$     d.  $\frac{29}{6}$   
 2. a.  $2\frac{1}{8}$     b.  $3\frac{5}{6}$     c.  $3\frac{4}{5}$     d.  $2\frac{1}{7}$   
 3. a.  $\frac{4}{6}, \frac{6}{9}, \frac{8}{12}, \frac{10}{15}$     b.  $\frac{8}{14}, \frac{12}{21}, \frac{16}{28}, \frac{20}{35}$     c.  $\frac{10}{12}, \frac{15}{18}, \frac{20}{24}, \frac{25}{30}$   
 d.  $\frac{6}{10}, \frac{9}{15}, \frac{12}{20}, \frac{15}{25}$  (Answer may vary)  
 4. a. 18    b. 24    c. 81  
 5. a. Yes    b. Yes    c. No  
 6. a.  $\frac{5}{9}$  or  $\frac{2}{5}$     b.  $\frac{2}{5}$     c.  $\frac{3}{4}$     d.  $\frac{5}{9}$   
 7. a.  $\frac{9}{35}, \frac{9}{28}, \frac{9}{14}, \frac{9}{7}$     b.  $\frac{4}{12}, \frac{3}{12}, \frac{5}{12}, \frac{4}{12}$   
 8. a.  $\frac{12}{3}, \frac{12}{6}, \frac{12}{7}, \frac{12}{14}$     b.  $6\frac{4}{18}, 3\frac{2}{18}, \frac{17}{18}, \frac{7}{18}$   
 9. a.  $\frac{5}{4}$  or  $1\frac{1}{4}$     b.  $2\frac{2}{3}$     c. 4    d.  $5\frac{4}{5}$   
 10. a.  $\frac{3}{5}$     b.  $\frac{1}{2}$     c.  $\frac{1}{5}$     d.  $\frac{1}{4}$   
 11.  $26\frac{2}{3}$  kg

#### HOTS

$$9\frac{4}{9} \text{ km}$$

#### Mental Maths

1. c    2. c    3. a    4. b

### Chapter 5: Geometry

#### Warm Up

1. a. i. Full Moon    ii. First Quarter  
 iii. Waxing Crescent    iv. Waning Gibbous

- b. i.  $\frac{3}{8}$  cycle    ii.  $\frac{7}{8}$  cycle  
 iii.  $\frac{3}{4}$  cycle    iv. 1 complete cycle

2. a. Line segment, ( $\overline{GH}$ )    b. Line, ( $\overleftrightarrow{AB}$ )  
 c. Ray, ( $\overrightarrow{RS}$ )    d. Ray, ( $\overleftarrow{VU}$ )

#### Exercise 5A

1. b and d  
 2. a.  $\angle PQR$     b.  $\angle XYZ$     c.  $\angle LMN$     d.  $\angle EFG$   
 3. a. Arms:  $\overrightarrow{OP}, \overrightarrow{OT}$ ; Vertex: O; Angle:  $\angle POT$   
 b. Arms:  $\overrightarrow{US}, \overrightarrow{UN}$ ; Vertex: U; Angle:  $\angle SUN$   
 4. a. A    b. A, C, D

#### Exercise 5B

1. a.  $60^\circ$     b.  $140^\circ$     c.  $25^\circ$     d.  $165^\circ$   
 e.  $140^\circ$     f.  $90^\circ$   
 2. a.  $65^\circ$     b.  $110^\circ$     c.  $90^\circ$     d.  $105^\circ$

#### Exercise 5C

1. a. Acute angle    b. Right angle  
 c. Obtuse angle    d. Straight angle  
 2. a. Obtuse angle    b. Right angle  
 c. Straight angle    d. Reflex angle  
 e. Acute angle    f. Reflex angle  
 g. Right angle    h. Acute angle  
 3. a. Acute angle    b. Obtuse angle  
 c. Obtuse angle    d. Straight angle  
 e. Right angle    f. Complete angle  
 g. Acute angle    h. Obtuse angle  
 i. Acute angle    j. Reflex angle  
 4. a.  $\angle DEF$  – Acute angle    b.  $\angle ABC$  – Straight angle  
 c.  $\angle XYZ$  – Right angle    d.  $\angle MNO$  – Reflex angle  
 5. Acute angles: C, D, E; Obtuse angle: A, H; Right angle: B, F, G  
 6. b.  $\angle GEH, \angle HEG, \angle E$     c.  $\angle XYZ, \angle ZYX, \angle Y$   
 7. a.  $\angle ABD$  or  $\angle DBE$     b.  $\angle ABE$   
 c.  $\angle ABC$     d.  $\angle CBD$

#### Exercise 5D

1. b.  $\frac{1}{8}$  turn    c.  $(\frac{1}{2} + \frac{1}{8})$  turn or  $\frac{5}{8}$  turn  
 d.  $(\frac{1}{2} + \frac{1}{16})$  turn or  $\frac{9}{16}$  turn  
 2. a.  $\frac{1}{4}$     b.  $\frac{1}{2}$     c.  $\frac{3}{4}$     d. Full  
 3. a. North    b. South    c. West    d. East  
 e. South    f. West    g. West

#### Exercise 5E

1. a. A, B and C    b.  $\angle ABC, \angle BCA, \angle BAC$     c. AB, BC, AC  
 2. a. Equilateral triangle    b. Scalene triangle    c. Isosceles triangle  
 d. Scalene triangle    e. Equilateral triangle    f. Scalene triangle  
 3. a. Right angled triangle    b. Obtuse angled triangle  
 c. Obtuse angled triangle    d. Acute angled triangle  
 e. Acute angled triangle    f. Obtuse angled triangle  
 4. a, d    5. b, c, d, e  
 6. a. iv    b. i    c. ii    d. iii    e. ii



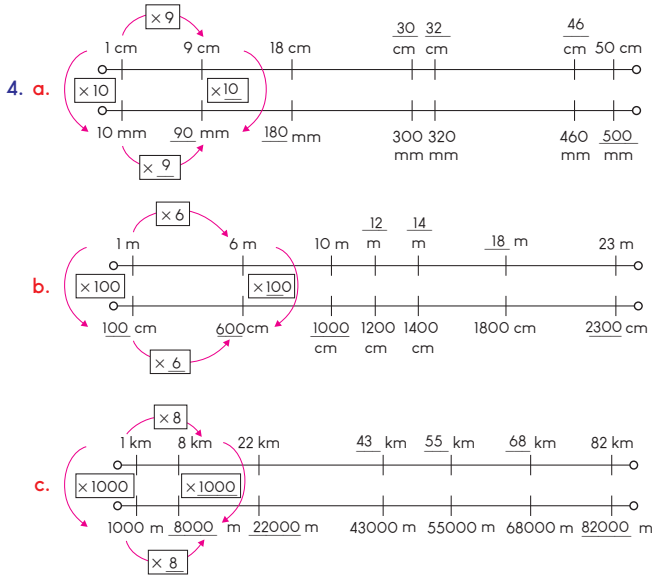
## Chapter 7: Measurement

### Warm Up

- 250 cm, 225000 g
  - 365 cm, 248000 g
  - 182 cm, 95000 g
  - 212 cm, 76000 g
  - 302 cm, 5400000 g
  - 168 cm, 145000 g
- 15000

### Exercise 7A

- m
  - cm
  - m
  - km
  - km
  - m
  - m



- iii
  - i
  - v
  - iv
  - ii
- 80 hm
  - 120000 dm
  - 440000 mm
  - 250 m
  - 5700 mm
  - 4200 cm
  - 3 m
  - 45 km
  - 3 dam
  - 3260 m
  - 27 dam
  - 480 mm
- 72 inches
  - 600 mm
  - 39 inches
  - 8 km
  - 21 feet
  - 144 inches

### Exercise 7B

- 88 m 72 cm
  - 19 km 309 m
  - 29 cm 9 mm
  - 68 km 550 m
  - 18 m
  - 277 km 260 m
  - 252 cm
  - 12 cm 2 mm
  - 14 m 14 cm
  - 3 km 334 m
  - 3 m 97 cm
  - 22 m 80 cm
  - 210 m
  - 89 m
- Statue of Liberty and The Motherland Calls
  - Statue of Unity and Christ the Redeemer
  - The Motherland Calls
- 2 km 100 m    8. 4 km 950 m    9. 30 km 800 m
- Mother, 38 cm
- 9 feet 10 inches
  - 3 feet 2 inches
  - 1 foot 4 inches

### Exercise 7C

- 600 g
  - 1 kg 800 g
  - 2 kg 500 g
  - 2 kg 600 g
  - 150 g
  - 650 g
- 5042 g
  - 5 kg 190 g
  - 9500 g
  - 8234 mg
  - 7 g 234 mg
  - 6110 g
- 1 kg 375 g
  - 5 kg 264 g
  - 8 kg
  - 9 kg 200 g
  - 48000 g
  - 60,000 mg
  - 77 cg
  - 1312 g
  - 5 g 324 mg
  - 5003 g
  - 3 kg 260 g
  - 1 kg 999 g
  - 5
  - 6, 8, 50
  - 12000
  - 85, 60

### Exercise 7D

- 33 kg 500 g
  - 34 g 896 mg
  - 11 kg 61 g
  - 54 g 67 mg
  - 481 g 500 mg
  - 423 kg 950 g
  - 1703 g
  - 17 g 503 mg
  - 7 kg 300 g
  - 7 kg 700 g
  - 7 kg 75 g
  - 40 kg 125 g
  - 155000 mg
  - 6 kg
  - 4 kg 250 g
  - 55 kg 570 g
  - 43 kg 775 g
  - ₹198

Item	Weight	Cost per kg	Total cost
Rice	12 kg 500 g	₹60	₹750
Flour	7 kg 250 g	₹40	₹290
Sugar	5 kg	₹45	₹225
Chana dal	3 kg 600 g	₹70	₹252
Besan	4 kg	₹60	₹240
Jaggery	1 kg 400 g	₹50	₹70

### Exercise 7E

- 5000 mL
  - 230 mL
  - 2005 mL
  - 500 mL
  - 3 L
  - 5L 648 mL
  - 70,000 L
  - 628000 L
  - 13400 daL
  - 6 kL
  - 3523 mL
  - 250 mL
  - 2 L 450 mL
  - 3 L 765 mL
  - 3092 mL
  - 38000 mL

### Exercise 7F

- 13 kL 677 L
  - 22 L 635 mL
  - 4 L 655 mL
  - 7 kL 250 L
  - 204 L 250 mL
  - 96 kL 744 L
  - 4 L 702 mL
  - 1 kL 655 L
  - 1 L 600 mL
  - 700 mL
  - 1 L 500 mL
  - 2 L 500 mL
  - 35 L 105 mL
  - 1 L 145 mL
  - 36 L
  - 1 L 645 mL
  - 99 L 395 mL
  - 2 L 750 mL
  - 100 packets
  - 84 kL 270 L
  - 447 L
  - 894 bottles
  - 5218 L
  - ₹5,00,928

### Learning Logs

- mm
  - gram
  - kL
  - divide
  - multiply
- 6000
  - 18
  - 2; 342
  - 4200
  - 52
  - 1; 23
  - 45000
  - 4800
  - 49
- 9
  - 3; 252
  - 43000
  - 44
  - 5360
  - 7095
- 8000
  - 2017
  - 2; 740
  - 2400
  - 3155
  - 3060
- 24 kg
  - 303 kg
  - 16L 500 mL
  - 164 mL
  - 82 km 177 m

### Mental Maths

- <
  - >
  - =
  - <
  - >
  - =
  - >
- milligram (mg)
  - 1000
  - divide

### HOTS

- 60480 L
- Fill the 5-litre bowl and pour water from it into the 4-litre bowl until it is full. Empty the 4-litre bowl, then pour the remaining 1 litre from the 5-litre bowl into the 4-litre bowl. Refill the 5-litre bowl and carefully pour water into the 4-litre bowl (which already contains 1 litre). This will require only 3 litres, leaving exactly 2 litres in the 5-litre bowl, as required.

## Chapter 8: Perimeter and Area

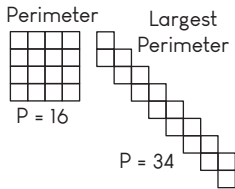
### Warm Up

- a. 26 units    b. 24 units    c. 26 units    d. 26 units  
e. 40 units  
Poster (e) has the largest perimeter.
- Yes, posters (a), (c) and (d)
- a. 42 units squares    b. 35 units squares  
c. 42 units squares    d. 42 units squares  
e. 91 units squares

### Exercise 8A

- Shape b has largest perimeter.
- a. 40 cm    b. 320 cm    c. 600 cm    d. 32 cm  
e. 468 cm    f. 120 cm
- a. i. 28 cm    ii. 34 cm    iii. 5 cm    iv. 18 m  
b. i. 32 cm    ii. 10 cm    iii. 60 cm    iv. 5 m
- a. 19 cm    b. 51 cm    c. 62 cm    d. 22 m
- 36 m
- Rectangular park: 280 m, square park : 400 m; perimeter of square park is 120 m greater.
- 45 m    8. ₹36,250    9. 1632 m    10. 77 m
- 38 cm    12. 54 cm    13. 27 cm

### 14. Shortest Perimeter



### Exercise 8B

- a. 3 sq. cm    b. 6 sq. cm    c. 9 sq. cm    d. 15 sq. cm
- a. 31 sq. cm    b. 17 sq. cm    c. 56 sq. cm    d. 30 sq. cm  
e. 22 sq. cm    f. 30 sq. cm
- a. 9 sq. cm    b. 19220 sq. cm    c. 324 sq. cm    d. 9450 sq. cm  
e. 1024 sq. cm    f. 2700 sq. cm
- a. i. 6    ii. 23    iii. 108    iv. 50  
v. 28    vi. 17  
b. i. 36    ii. 64    iii. 144    iv. 9  
v. 121    vi. 169
- a. 240 sq. cm    b. 140 sq. cm    c. 10560 sq. cm
- a. 256 sq. cm    b. 1600 sq. cm    c. 1156 sq. m
- 34 m    8. ₹2,484    9. 1600 blocks
- ₹4,800    11. 800 tiles    12. 480 sq. m    13. 900 sq. m

### Exercise 8C

- a. 3 sq. units    b. 6 sq. units    c. 6 sq. units    d. 10 sq. units
- a. 6 sq. units    b. 9 sq. units    c. 9 sq. units    d. 14 sq. units  
e. 9 sq. units    f. 14 sq. units    g. 10 sq. units

3. Area (in sq. units)	15	18	9	6
Shape	C	D, E	A, F, H, I, K	B, G, J

### Learning Logs

- a. 24 cm    b. 53 cm
- a. 368 sq. cm    b. 288 sq. cm
- a. 13 cm    b. 17 m
- a. 18 cm    b. 4 m

- 2500 m    6. 208 sq. m
- Carpet with length = 15 m and breadth = 13 m    8. c

### Mental Math

- b    2. a    3. c    4. b

### HOTS

- Six    2. Four

## Chapter 9: Maps and Location

### Warm Up

- South    2. East    3. North    4. West

### Exercise 9A

- a. West    b. East    c. North
- b. Panchkuian road    c. Underground Parking  
d. 6 blocks; A, B, C, D, E, F  
e. Baba Kharak Singh Marg
- a. Tamil Nadu    b. Arunachal Pradesh    c. Chhattisgarh  
d. Telangana    e. 1020 km
- a. 12    b. ₹32    5. South
- a. (11, 2)    b. (6, 6)    c. (12, 9)    d. Panda  
e. Monkey

### Learning Logs

- a. Jind    b. Rewari    c. Hisar    d. North-west
- a. 8, 5    b. (3, 7)    c. Pumpkin    d. Cherry

### Mental Math

- a    2. b    3. c    4. a

### HOTS

- Morigaon    2. South-east

## Chapter 10: Time

### Warm Up

Country	Clock	Time	Country	Clock	Time
Prayagraj India		9:00	Rome Italy		4:30
Bagdad Iraq		6:30	Brasília Brazil		12:30
Beijing China		11:30	Cairo Egypt		5:30

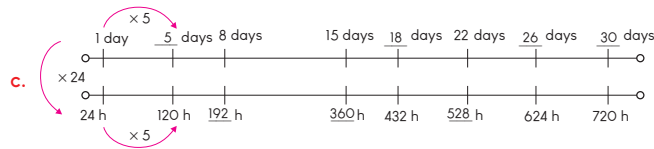
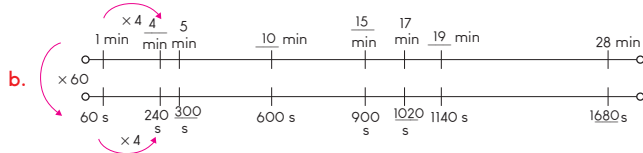
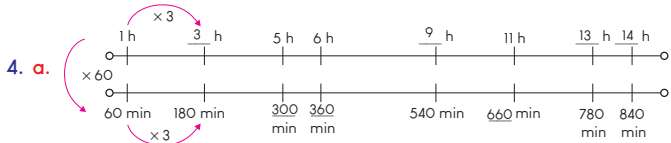
### Exercise 10A

- a. 5:40 a.m.    b. 1:20 a.m.    c. 12:20 a.m.  
d. 12:29 p.m.    e. 11:30 a.m.    f. 4:40 p.m.    g. 4:25 p.m.  
h. 12 midnight    i. 10:22 p.m.    j. 9:38 p.m.    k. 1:48 p.m.  
l. 8:00 p.m.
- a. 06:05 hours    b. 10:24 hours    c. 00:06 hours    d. 19:36 hours  
e. 12:15 hours    f. 14:17 hours    g. 23:00 hours    h. 04:57 hours  
i. 00:00 hours    j. 01:40 hours    k. 15:30 hours    l. 21:40 hours
- a. → ii    b. → iv    c. → i    d. → v    e. → iii
- a. 9:37 p.m.    b. 5:00 p.m.    c. 7:39 a.m.    d. 12:55 a.m.



**Exercise 10B**

2. a. 20                      b. 30                      c. 45



5. a. 480 seconds    b. 774 seconds    c. 1296 seconds    d. 12316 seconds  
 6. a. 840 minutes    b. 594 minutes    c. 828 minutes    d. 5075 minutes  
 7. a. 183 hours        b. 312 hours        c. 211 hours        d. 294 hours  
 8. a. 47 days         b. 67 days         c. 295 days  
    d. 1095 days or 1096 days  
 9. a. 120 months     b. 70 months        c. 151 months  
 10. a. 2 hours 18 minutes    b. 6 hours 35 minutes  
      c. 17 hours 3 minutes     d. 33 hours 26 minutes  
 11. a. 23 minutes 34 seconds    b. 36 minutes 5 seconds  
 12. a. 3 days 3 hours                b. 30 days 15 hours  
      c. 22 days 11 hours              d. 42 days 10 hours  
 13. a. 32 weeks 6 days                b. 48 week 5 days

**Exercise 10C**

1. a. 6 days 8 h                      b. 5 days 21 h  
    c. 10 weeks 3 days                d. 15 h 58 min  
    e. 15 min 44 s  
 2. a. 2 days 8 h                      b. 1 week 5 days  
    c. 1 h 15 min                        d. 15 h 20 min  
    e. 3 min 7 s                         f. 9 min 12 s  
    g. 4 years 3 months  
 3. a. 12:20 a.m.    b. 3:10 a.m.  
 4. a. 11:30 a.m.    b. 9 : 50 a.m.  
 5. 7 h 45 min  
 6. a. 6 h 45 min    b. 8:00 p.m.    c. 10 h            d. 67 h 50 min  
    e. 7 years 4 months 27 days    f. 70 days  
    g. 27 years 7 months

**Learning Logs**

1. a. 19:22 hours    b. 12:48 a.m.    c. 08:05 hours    d. 9:25 p.m.  
 2. a. 2:10 p.m.        b. 3:35 a.m.        c. 05:05 hours    d. 12:25 p.m.  
    e. 9:30 p.m.        f. 05:50 hours  
 3. a. 17 h 42 min    b. 25 h 10 min    c. 38 h 43 min    d. 18 h 55 min  
 4. a. 16 years 5 months                b. 51 days 13 hours  
 5. a. 5 min 49 s        b. 8 days 23 h     c. 26 years 8 months

6. 7:10 p.m.                      7. 21 hours 15 minutes  
 8. 11th January

**HOTS**

1. 9:00 p.m.    2. 103680 beats per day

**Mental Maths**

1. a                      2. d                      3. b                      4. a

**Chapter 11: Money**

**Warm Up**

1. ₹880                      2. ₹2,200                      3. ₹9.60                      4. ₹22.50  
 5. ₹2,124                      6. ₹7,434                      7. ₹2,448                      8. ₹5,610  
 9. ₹17.40                      10. ₹46.20                      11. ₹144                      12. ₹960

**Exercise 11A**

1. ₹135  
 2. The possible combination of ₹100 and ₹50 notes are: (0,17), (1, 15), (2, 13), (3, 11), (4, 9), (5, 7), (6, 5), (7, 3), (8, 1)  
 3. ₹520  
 4. a. Two ₹50 notes and one ₹10 note                      b. 9  
    c. 12

**Exercise 11B**

1. a. 20 for ₹80    b. 5kg for ₹100    c. 8 for ₹288  
    d. 18 dozen for ₹684  
 2. a. ₹72, ₹135        b. ₹300                c. ₹500                d. ₹1,080  
    e. ₹7,800            f. ₹1,20,000        g. ₹2,520

**Exercise 11C**

1. Wire- ₹500; Bulb - ₹540; Holder - ₹150; Switch - ₹120, Total- ₹1,310  
 2. b. ₹92                      c. ₹108  
 3. b. ₹275                      c. ₹225  
 4. a. ₹1,150                      b. ₹350

**Learning Logs**

1. a. ₹680                      b. ₹612                      c. ₹198

S. No.	Item	Quantity	Rate	Cost
1.	Orange	2 kg	₹60/kg	₹120
2.	Grapes	3 kg	₹110/kg	₹330
3.	Kiwis	8	₹30/piece	₹240
4.	Pineapple	1	₹130/piece	₹130
<b>Total</b>				<b>₹820</b>

3. ₹645                      4. ₹3,120

**Mental Maths**

1. a                      2. b                      3. b                      4. c

**HOTS**

1. No, ₹100                      2. Best Plan: ₹861 for 84 days

**Chapter 12: Data Handling**

**Warm Up**

Favourite flowers	No. of students
Rose	11
Lily	6
Aster	7
Tulip	4
Total	28

- a. 4                      b. Lily                      c. Rose

**Exercise 12A**

1. a. Red delicious      b. 2 kg      c. 64 kg
2. a. 24      b. Bus      c. Bicycle
3. a. 12 apples      b. 2 apples      c. 248 seeds
4. a. 96      b. Zip-lining      c. 44 students      d. 4 students

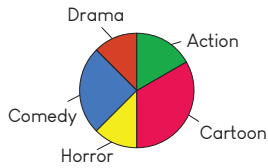
**Exercise 12B**

1. a. Sales of toys in a week  
b. 1 unit = 2 toys      c. 16 toys      d. Friday      e. Tuesday  
f. 86 toys
2. a. ₹3,500      b. Food      c. ₹16,500      d. Clothes

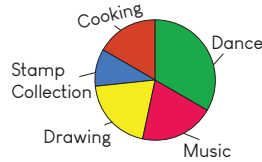
**Exercise 12C**

1. a. Spring      b.  $\frac{1}{4}$       c. Winter and summer  
d. Autumn

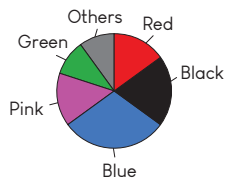
2. Action:  $\frac{1}{6}$ , Cartoon:  $\frac{1}{3}$ ,  
Horror:  $\frac{1}{8}$ , Comedy:  $\frac{1}{4}$ , Drama:  $\frac{1}{8}$



3. a. Dance:  $\frac{1}{3}$ , Music:  $\frac{1}{5}$ ,  
Drawing:  $\frac{1}{5}$ ,  
Stamp Collection:  $\frac{1}{10}$ ,  
Cooking:  $\frac{1}{6}$



- b. Red:  $\frac{3}{20}$ , Black:  $\frac{1}{5}$ , Blue:  $\frac{3}{10}$ ,  
Pink:  $\frac{3}{20}$ , Green:  $\frac{1}{10}$ ,  
Others:  $\frac{1}{10}$



**Learning Logs**

3. a. 15 families      b. 5      c. 4 members

**Mental Math**

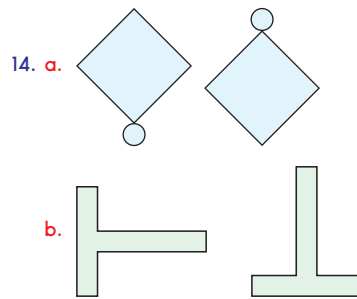
1. data      2. bar graph      3. pictograph
4. circle graph      5. 4

**HOTS**

1. 10      2. 8      3. white

**Model Test Paper 2**

1. b      2. b      3. d      4. a      5. b
6. d      7. c      8. c      9. d      10. a
11. a. Perimeter      b. Area      c. 12 cm
12. a. A. Yes      B. Yes      C. No  
b. A. 14 sq. cm      B. 16 sq. cm      C. 6 sq. cm
13. a.  $\frac{1}{4}$  turn      b.  $\frac{1}{2}$  turn      c.  $\frac{1}{4}$  turn      d.  $\frac{1}{2}$  turn



15. a. 18054      b. 8 L 235 mL      c. 8200  
d. 32000      e. 54000      f. 3416
16. a. 19 kg 170 g      b. 2 km 100 m per day  
c. 84 kL 270 L
17. a. → ii      b. → iv      c. → i      d. → v      e. → iii
18. a. ₹1,379