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MATH GENIUS

Think Smart, Solve Fast

Ver. 2.0 >



Answer Key

Experience the Joy of Learning Mathematical Skills



ANSWERS

Chapter 1: Large Numbers

LET'S RECALL

- Three lakh eighty-four thousand four hundred.
- Greatest 6-digit number = 999999 and Smallest 6-digit number = 100000.
- (a) Seven lakh fifty-four thousand eight hundred ninety-four
(b) Five lakh four hundred eighty-nine
- (a) 8,47,001 (b) 9,99,999
- (a) Face value = 2, Place value = 20000
(b) Face value = 0, Place value = 0
- 540789

Practice Time 1A

- (a) Five lakh forty-five thousand eight hundred sixty-four
(b) Forty-six lakh thirty-four thousand five hundred sixty-one
(c) Forty lakh fifty-six thousand two hundred forty-nine
(d) Seven crore seventy-three lakh twenty-six thousand four hundred thirty-four
(e) Eight crore seventy-nine lakh twenty-eight thousand forty-three
(f) Seven crore thirty lakh thirty-eight thousand nine hundred sixty-three
- (a) 5,34,948 (b) 50,70,694 (c) 6,66,24,412 (d) 7,00,73,016
- (a) 78,54,475 — Seventy-eight lakh fifty-four thousand four hundred seventy-five.
(b) 7,98,76,560 — Seven crore ninety-eight lakh seventy-six thousand five hundred sixty.
(c) 8,00,78,004 — Eight crore seventy-eight thousand four.
(d) 5,76,54,323 — Five crore seventy-six lakh fifty-four thousand three hundred twenty-three.
(e) 6,00,52,902 — Six crore fifty-two thousand nine hundred two.
(f) 5,99,34,230 — Five crore ninety-nine lakh thirty-four thousand two hundred thirty.
- 1 ones = 1, 4 tens = 40, 9 hundreds = 900, 7 thousands = 7000, 8 ten thousands = 80000, 7 lakhs = 700000, 6 ten lakhs = 6000000, 1 crores = 10000000

Practice Time 1B

- (a) 70 (b) 6000 (c) 400000 (d) 0 (e) 70000000
(f) 800000 (g) 0 (h) 5000000 (i) 70000
- 8000000 - 800 = 7999200
- 6000 + 600000 = 606000
- (a) Predecessor — 2684502, Successor — 2684504
(b) Predecessor — 7095204, Successor — 7095206
(c) Predecessor — 5598004, Successor — 5598006
(d) Predecessor — 4030199, Successor — 4030201
(e) Predecessor — 67600541, Successor — 67600543
(f) Predecessor — 90908031, Successor — 90908033
(g) Predecessor — 30540319, Successor — 30540321
(h) Predecessor — 88732100, Successor — 88732102
- (a) 70000000 + 7000000 + 800000 + 50000 + 6000 + 400 + 30 + 2
(b) 90000000 + 5000000 + 600000 + 70000 + 8000 + 900 + 80 + 1
(c) 7000000 + 300000 + 40000 + 700 + 10 + 8
(d) 80000000 + 6000000 + 900000 + 80000 + 7000 + 600 + 50 + 5
(e) 30000000 + 7000000 + 800000 + 90000 + 8000 + 700 + 60 + 2
(f) 8000000 + 400000 + 90000 + 9000 + 300 + 80 + 5
(g) 70000000 + 6000000 + 200000 + 50000 + 9000 + 5
(h) 40000000 + 5000000 + 600000 + 200 + 80 + 2
(i) 9000000 + 900000 + 80000 + 3000 + 400 + 50 + 1
- (a) 80046053 (b) 70074502 (c) 9059304 (d) 5908073
(e) 40405002

Practice Time 1C

- (a) > (b) > (c) < (d) > (e) = (f) <
- (a) 863532, 7324545, 7825216, 8654627
(b) 2000413, 2050009, 2500496, 5231761
(c) 6954521, 6954524, 6954530, 6954544
(d) 75463211, 75463251, 75464521, 75465421

- (a) 97479, 87976, 76049, 75959
(b) 654675, 528781, 453170, 452678
(c) 9400045, 7983678, 7893569, 798667
(d) 98645321, 9865021, 9864542, 9864521
- Smallest-305678, greatest-876530
- Smallest-10456789, greatest-98765410
- (a) 7775420, 2000457 (b) 9999765, 5555679
(c) 7777320, 2000037 (d) 9999953, 3333359

Practice Time 1D

- (a) 65,028,107 (b) 82,245,000 (c) 59,106,307 (d) 40,093,406
(e) 72,007,700 (f) 98,999,099
- (a) Twenty-five million eight hundred ninety thousand four hundred sixty-seven
(b) Forty-three million eight hundred sixty-five thousand eight hundred ninety
(c) Five million seventy thousand six
(d) Fifty-two million eight hundred thousand five hundred thirty-one
(e) Six million one hundred thousand seven hundred eighty-two
(f) Twenty million two hundred thousand two hundred
- (a) 78,987,656 (b) 89,007,650 (c) 80,004,905 (d) 7,540,565
(e) 95,493,207 (f) 34,896,705
- (a) 1000 (b) 100 (c) 10 (d) 100

Practice Time 1E

- (a) 80 (b) 250 (c) 870 (d) 4240
(e) 6050 (f) 8870 (g) 68740 (h) 508380
- (a) 400 (b) 600 (c) 7700 (d) 8900
(e) 17200 (f) 28800 (g) 120100 (h) 318600
- (a) 9000 (b) 9000 (c) 108000 (d) 37000
(e) 219000 (f) 59000 (g) 1036000 (h) 2867000
- (a) (i) 52670 (ii) 52700 (iii) 53000
(b) (i) 37650 (ii) 37600 (iii) 38000
(c) (i) 25890 (ii) 25900 (iii) 26000
(d) (i) 41980 (ii) 42000 (iii) 42000
(e) (i) 547130 (ii) 547100 (iii) 547000
(f) (i) 258360 (ii) 258400 (iii) 258000
(g) (i) 362780 (ii) 362800 (iii) 363000
(h) (i) 1670250 (ii) 1670200 (iii) 1670000

Practice Time 1F

- (a) CCCXXVIII (b) DXVIII (c) DCCCXCII (d) MMXC
(e) DCCLXXXV (f) MDC
- (a) 35 (b) 73 (c) 7 (d) 1009 (e) 165 (f) 1034
- (a) < (b) > (c) = (d) > (e) = (f) <
- (b), (c), (d), (e) and (f)
- (a) MDCCCLXIX (b) MDCCCLXXXIII (c) MCMXX
(d) MCMXXX (e) MCMXLII (f) MCMXLIV
(g) MCMXLVIII

Mental Maths (Page 25)

- (a) 2. (b) 3. (d) 4. (a) 5. (a)

Maths Connect (Page 25)

Ascending order: Hyderabad < Bengaluru < Delhi < Mumbai
Descending order: Mumbai > Delhi > Bengaluru > Hyderabad

Chapter Assessment

- (a) (ii) (b) (iii) (c) (iv) (d) (iii)
- 9985313 3. 0 4. 100 thousands
- 10000 thousands 6. Nearest 1000 7. Earth by 3010000 m
- Do it yourself
- First phase— 2,40,000 saplings, Second phase— 1,90,000 saplings
- Local trains

Challenge Question (Page 27)

3782; three thousand seven hundred eighty-two; three thousand seven hundred eighty-two.

Chapter 2: Operations on Large Numbers

LET'S RECALL

1. 4,19,086 2. 24,34,335 3. 1,11,05,125 4. ₹28

Practice Time 2A

1. (a) 88,21,401 (b) 99,21,419 (c) 95,29,399 (d) 86,59,024
 (e) 10,62,694 (f) 16,47,505
 2. (a) 80,04,272 (b) 6,66,55,762
 (c) 12,56,16,706 (d) 10,89,90,011

3. (a)
$$\begin{array}{r} 54368 \\ + 63832 \\ \hline 118200 \end{array}$$

(b)
$$\begin{array}{r} 634368 \\ + 49364 \\ \hline 683732 \end{array}$$

(c)
$$\begin{array}{r} 726438 \\ + 254843 \\ \hline 981281 \end{array}$$

(d)
$$\begin{array}{r} 714636 \\ + 154342 \\ \hline 868978 \end{array}$$

(e)
$$\begin{array}{r} 536436 \\ + 623429 \\ \hline 1159865 \end{array}$$

(f)
$$\begin{array}{r} 87364 \\ + 46372 \\ \hline 133736 \end{array}$$

4. (a) 26,458 (b) 4,36,483 (c) 0 (d) 0
 5. (a) 669 (b) 794 (c) 2205 (d) 1227
 6. (a) 10,45,273 toy cars (b) 1,20,467 students
 (c) 2,79,214 people (d) 1,53,903 letters

Practice Time 2B

1. (a) 9,91,081 (b) 2,47,64,271 (c) 17,75,336 (d) 72,44,065
 (e) 12,56,702 (f) 56,00,306
 2. (a) 4,70,005 (b) 25,92,072 (c) 37,42,763 (d) 5,32,77,165
 (e) 2,72,77,165 (f) 66,66,667

3. (a)
$$\begin{array}{r} 527364 \\ - 112918 \\ \hline 414446 \end{array}$$

(b)
$$\begin{array}{r} 608090 \\ - 180508 \\ \hline 427582 \end{array}$$

(c)
$$\begin{array}{r} 476436 \\ - 239482 \\ \hline 236954 \end{array}$$

(d)
$$\begin{array}{r} 573694 \\ - 294833 \\ \hline 278861 \end{array}$$

(e)
$$\begin{array}{r} 673648 \\ - 417342 \\ \hline 256306 \end{array}$$

(f)
$$\begin{array}{r} 840365 \\ - 529637 \\ \hline 310728 \end{array}$$

4. (a) 8,67,383 (b) 0 (c) 4,20,804 (d) 1
 (e) 0 (f) 2,43,646
 5. (a) 65,59,406 (b) 9,07,88,652 (c) 7,78,67,778 (d) 2,45,48,933
 6. (a) Nine crore one (b) 6,89,61,934
 (c) Candidate A; 1,47,983 votes (d) 4,42,357 bags
 (e) 65,699 bricks (f) Anil; 2,73,310

Practice Time 2C

1. (a) 3,15,249 (b) 21,01,580 (c) 24,15,564 (d) 1,05,39,072
 (e) 86,43,404 (f) 56,99,610 (g) 86,27,850 (h) 1,46,48,810
 2. (a) 75,570 (b) 78,05,100 (c) 4,65,500 (d) 97,43,500
 (e) 7,26,300 (f) 50,90,000
 3. (a) 60 (b) 0 (c) 100×5 or 5×100
 (d) 5566 (e) 500, 16
 4. (a) - (iii) (b) - (iv) (c) - (i) (d) - (ii) (e) - (vi) (f) - (v)
 5. (a) 2,00,000 (b) 19,500 (c) 1,55,000 (d) 40,000
 (e) 4,36,500 (f) 3,36,400 (g) 1,00,000 (h) 6,66,600
 (i) 20,05,000
 6. (a) 300 (b) 1200 (c) 490 (d) 4200 (e) 1100
 (f) 1300 (g) 9500 (h) 10100
 7. (a) 468 (b) 336 (c) 2325 (d) 1276 (e) 3332
 (f) 2652 (g) 19,701 (h) 19,899
 8. (a) ₹4,79,850 (b) 4,57,500 litres
 (c) 6,75,000 toys (d) 38,998 litres; ₹18,71,904

Practice Time 2D

1. (a) Q = 30,637, R = 3 (b) Q = 1,25,149, R = 5 (c) Q = 45,559, R = 11
 (d) Q = 18,967, R = 22 (e) Q = 10,307, R = 63 (f) Q = 1284, R = 36
 (g) Q = 3795, R = 164 (h) Q = 1601, R = 22
 2. (a) 10,231 (b) 3,23,128

3. (a) 1 (b) 1 (c) 6574 (d) 0 (e) 4032
 4. (a) - (iii) (b) - (i) (c) - (v) (d) - (vi) (e) - (ii) (f) - (iv)
 5. (a) ₹2304 (b) 403 (c) ₹226 (d) 9980 boxes

Practice Time 2E

1. (a) 40,000 (b) 3,00,000 (c) 6,30,000 (d) 500
 2. (a) ₹65,000 (b) ₹25,000 (c) ₹6,99,000 3. 50
 4. Actual sum = 10,51,370, estimated sum = 10,50,000
 5. Actual product = 11,28,176, estimated product = 8,00,000
 6. 10,00,000 votes

Practice Time 2F

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

Practice Time 2G

1. 3 2. 1755 3. 277 4. 102 5. 0 6. 4
 7. 25 8. 832 9. 440 10. 1870

Challenge Question (Page 51)

1. A = 1

2.
$$\begin{array}{r} 2797 \\ 124 \overline{) 346896} \\ \underline{- 248} \\ 988 \\ \underline{- 868} \\ 1209 \\ \underline{- 1116} \\ 936 \\ \underline{- 868} \\ 68 \end{array}$$

Chapter Assessment

1. (a) (i) (b) (iii) (c) (i) (d) (iii)
 2. 1,42,93,219 voters 3. ₹13,88,640
 4. 1,15,736 litres, ₹55,55,328 5. 5691 loaves
 6. 248 km
 7. 34999, 35400, 35499, 35444, 34766 (answer may vary)
 8. Apruv 9. 35,400 pages
 10. (a) $(17 - 7) \times 5$ (b) $(26 + 8) - 9$ (c) $(72 - 16) + 25$
 (d) $36 \div (13 - 7)$ (e) $(16 + 8) \div (9 - 3)$
 11. $4 \times 5 - 6$ 12. ₹167
 13. (a) 0 (b) 145
 14. (a) $\div$ (b) + (c) + (d) -

Mental Maths (Page 54)

1. (d) 2. (c) 3. (a) 4. (d) 5. (b)

Chapter 3: Factors and Multiples

LET'S RECALL

1. 1, 67 2. 35, 42, 49, 77, 56 3. 30
 4. (a) T (b) F (c) F (d) T

Practice Time 3A

1. (a) 1 (b) number itself (c) 1 (d) 0
 (e) 2 (f) less, equal (g) 1, 2, 3, 6
 2. (a) 1, 3, 9 (b) 1, 2, 4, 8, 16 (c) 1, 2, 4, 7, 14, 28
 (d) 1, 2, 4, 8, 16, 32 (e) 1, 2, 3, 4, 6, 8, 12, 16, 24, 48
 (f) 1, 3, 5, 9, 15, 45
 (g) 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72
 (h) 1, 3, 9, 27, 81 (i) 1, 2, 4, 5, 10, 20, 25, 50, 100
 (j) 1, 2, 3, 4, 6, 8, 9, 12, 16, 18, 24, 36, 48, 72, 144
 3. No
 4. (a) No (b) No (c) No (d) Yes

Practice Time 3B

1. (a) 7 (b) even (c) 1, itself (d) 0 (e) 9
 2. (a) 11, 22, 33, 44, 55 (b) 13, 26, 39, 52, 65
 (c) 18, 36, 54, 72, 90 (d) 24, 48, 72, 96, 120
 (e) 75, 150, 225, 300, 375
 3. (a) 384 (b) 500 (c) 1152
 (d) 18, 36, 54, 72, 90 (e) 11, 33, 55, 77, 99
 4. (a) 11, 22, 33, 44, 55, 66, 77, 88, 99, 110, 121, 132, 143, 154, 165, 176, 187, 198
 (b) 125, 150, 175, 200 (c) 152 (d) 15, 30, 45, 60, 75, 90
 5. (a) No (b) No (c) No (d) Yes

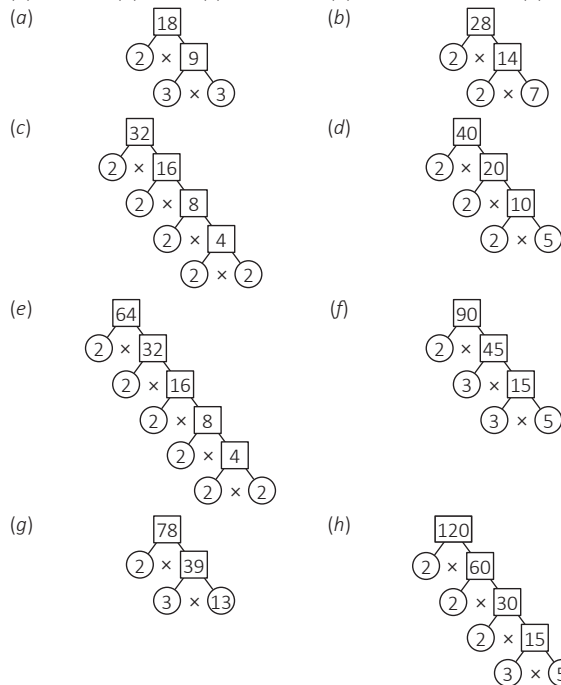
Practice Time 3C

Number	Divisible by						
	2	3	4	5	6	9	10
(a) 1359	X	✓	X	X	X	✓	X
(b) 1605	X	✓	X	✓	X	X	X
(c) 3420	✓	✓	✓	✓	✓	✓	✓
(d) 6543	X	✓	X	X	X	✓	X
(e) 5004	✓	✓	✓	X	✓	✓	X
(f) 7625	X	X	X	✓	X	X	X
(g) 4790	✓	X	X	✓	X	X	✓
(h) 5423	X	X	X	X	X	X	X
(i) 9963	X	✓	X	X	X	✓	X
(j) 6739	X	X	X	X	X	X	X
(k) 8400	✓	✓	✓	✓	✓	X	✓

2. (a) No (b) Yes (c) No

Practice Time 3D

1. (a) False (b) False (c) True (d) True (e) False (f) False
 2. (a) 97 (b) 2 (c) 25 (d) $2 \times 2 \times 2 \times 2 \times 2$ (e) 9
 3. (a)



4. (a) $3 \times 3 \times 3$ (b) $2 \times 2 \times 2 \times 2 \times 3$ (c) $2 \times 3 \times 3 \times 3$
 (d) $3 \times 3 \times 7$ (e) $2 \times 3 \times 13$ (f) 7×13
 (g) 5×13 (h) $2 \times 2 \times 2 \times 2 \times 2 \times 3$ (i) $2 \times 2 \times 2$
 (j) $2 \times 2 \times 2 \times 2 \times 7$ (k) $5 \times 5 \times 5$
 (l) $2 \times 2 \times 2 \times 2 \times 3 \times 3$

Think Tank (Page 66)

HCF

Practice Time 3E

1. (a) 1, 2, 3, 6 (b) 1, 3 (c) 1, 2, 4, 8 (d) 1, 2, 3, 6
 2. (a) 5 (b) 6 (c) 11 (d) 7 (e) 2 (f) 10
 (g) 2 (h) 8 (i) 15 (j) 14 (k) 25 (l) 7
 3. (a) 3 (b) 18 (c) 8 (d) 14 (e) 5 (f) 8
 (g) 12 (h) 11 (i) 4 (j) 11 (k) 5 (l) 24
 4. (a) 21 (b) 7 (c) 4 (d) 18 (e) 2 (f) 5
 (g) 4 (h) 5
 5. 40 6. 8 cm 7. 4 litres

Challenge Question (Page 70)

44 rows

Practice Time 3F

1. (a) 60, 120, 180 (b) 48, 96, 144 (c) 42, 84, 126
 (d) 90, 180, 270 (e) 30, 60, 90

2. (a) 84 (b) 144 (c) 110 (d) 1260 (e) 72 (f) 114
 (g) 180 (h) 300 (i) 160 (j) 66 (k) 120 (l) 96
 3. (a) 238 (b) 918 (c) 3198 (d) 75 (e) 270 (f) 72
 (g) 1440 (h) 240 (i) 504 (j) 60 (k) 495 (l) 72
 4. (a) 96 (b) 504 (c) 180 (d) 144 (e) 234 (f) 54
 (g) 800 (h) 490
 5. (a) 10:52 p.m. (b) 11:15 p.m.
 6. 24 hair bands 7. 9:27 a.m. 8. 705

Practice Time 3G

	HCF	LCM	Product of two numbers
(a)	12	27	324
(b)	4	252	1008
(c)	12	72	864
(d)	50	300	15000

2. 25 3. 18 4. 30 5. 15

Mental Maths (Page 74)

1. (a) 2. (b) 3. (a) 4. (b) 5. (b)

Chapter Assessment

1. (a)-(iv) (b)-(ii) (c)-(iv) 2. 18 rows 3. 9 plants
 4. 527253 $\rightarrow$ 572253 5. 600 cm 6. 10 cm 7. 2100 cm or 21 m
 8. ₹6 9. 12:04 p.m.
 10. 16 teams, each team having 3 girls and 2 boys 11. 132

Challenge Question (Page 77)

1. 131 (Answer may vary) 2. 24, $15 + 19 = 34$ piles

Chapter 4: Fractions

LET'S RECALL

1. (a) $\frac{3}{4}$ (b) $\frac{1}{4}$ (c) $\frac{1}{2}$
 2. $\frac{3}{4} - \frac{1}{2} = \frac{1}{4}$ cup 3. $\frac{3}{4}$

Think Tank (Page 83)

$\frac{6}{9}, \frac{2}{3}, \frac{4}{6}$ (Answer may vary)

Practice Time 4A

1. Unit fractions: $\frac{1}{8}, \frac{1}{5}, \frac{1}{10}, \frac{1}{14}$

	Like Fractions	Unlike Fractions
(a)	$\frac{2}{5}, \frac{7}{5}$	$\frac{5}{4}, \frac{1}{8}, \frac{3}{7}$
(b)	$\frac{3}{4}, \frac{1}{4}$	$\frac{4}{5}, \frac{6}{7}, \frac{5}{9}$
(c)	$\frac{4}{7}, \frac{2}{7}$	$\frac{4}{9}, \frac{3}{5}, \frac{7}{8}$

3. (a), (c), (d) 4. (b), (c), (d)
 5. (a) $\frac{19}{8}$ (b) $\frac{13}{3}$ (c) $\frac{35}{11}$ (d) $\frac{52}{7}$ (e) $\frac{111}{8}$
 6. (a) $4\frac{1}{4}$ (b) $4\frac{3}{4}$ (c) $5\frac{4}{5}$ (d) $3\frac{1}{4}$ (e) $5\frac{1}{3}$
 7. (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) $\frac{4}{10}, \frac{6}{15}, \frac{8}{20}, \frac{10}{25}, \frac{12}{30}$
 8. (a) 8, 20 (b) 8 (c) 15 (d) 28 (e) 6, 4, 2
 (f) 5, 15, 1 (g) 6, 20, 5
 9. (a) $\frac{20}{28}$ (b) $\frac{25}{35}$ (c) $\frac{35}{49}$
 10. (a) $\frac{1}{3}$ (b) $\frac{3}{4}$ (c) $\frac{4}{5}$ (d) $\frac{4}{5}$ (e) $\frac{8}{17}$ (f) $\frac{5}{13}$
 (g) $\frac{2}{5}$ (h) $\frac{4}{5}$ (i) $\frac{1}{3}$ (j) $\frac{5}{12}$

Think Tank (Page 86)

Ali

Practice Time 4B

- (a) $>$ (b) $<$ (c) $=$ (d) $<$ (e) $>$ (f) $<$
- (a) $\frac{3}{4}$ (b) $\frac{3}{8}$ (c) $\frac{5}{11}$ (d) $\frac{9}{24}$ (e) $\frac{3}{7}$ (f) $\frac{5}{9}$
- (g) $\frac{4}{11}$ (h) $\frac{5}{10}$
- (a) $\frac{4}{5}, \frac{1}{5}, \frac{2}{5}, \frac{9}{5}, \frac{14}{5}$ (b) $\frac{44}{25}, \frac{1}{25}, \frac{20}{25}, \frac{65}{25}, \frac{6}{25}$ (c) $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{5}{6}$
- (a) $\frac{5}{6}, \frac{7}{9}, \frac{2}{3}, \frac{17}{27}$ (b) $\frac{15}{16}, \frac{7}{8}, \frac{17}{24}, \frac{5}{12}$ (c) $\frac{1}{2}, \frac{7}{15}, \frac{2}{5}, \frac{3}{10}$

Practice Time 4C

- (a) 1 (b) $1\frac{1}{2}$ (c) $\frac{17}{20}$ (d) $3\frac{11}{14}$ (e) $3\frac{7}{24}$ (f) $4\frac{3}{4}$
- (g) $6\frac{29}{45}$ (h) $12\frac{1}{24}$ (i) $14\frac{4}{5}$ (j) $11\frac{19}{24}$
- (k) $27\frac{3}{5}$ (l) $6\frac{13}{42}$
- (a) $\frac{9}{44}$ (b) $\frac{1}{96}$ (c) $\frac{1}{3}$ (d) $1\frac{1}{22}$ (e) $10\frac{9}{10}$
- (f) $5\frac{7}{40}$ (g) $8\frac{1}{17}$ (h) $1\frac{31}{36}$
- (a) $4\frac{7}{30}$ (b) $5\frac{31}{60}$ (c) $7\frac{5}{8}$ (d) $1\frac{63}{84}$ (e) $4\frac{7}{12}$ (f) $7\frac{11}{15}$
- $4\frac{2}{15}$ kg (5) $3\frac{1}{6}$ m (6) $7\frac{11}{16}$ cm (7) $\frac{5}{12}$ litre
- $2\frac{5}{24}$ m (9) $2\frac{3}{8}$ kg

Think Tank (Page 91)

₹240

Practice Time 4D

- (a) $1\frac{7}{8}$ (b) $2\frac{6}{7}$ (c) 4 (d) $4\frac{1}{5}$
- (a) $\frac{1}{5}$ (b) $\frac{1}{4}$ (c) $\frac{1}{9}$ (d) $\frac{1}{12}$ (e) $\frac{5}{12}$ (f) $\frac{2}{45}$
- (g) $\frac{9}{80}$ (h) $\frac{7}{90}$
- (a) 30 km (b) 36 kg (c) $\frac{1}{6}$ (d) $1\frac{2}{5}$ hours
- $17\frac{1}{2}$ litres (5) $\frac{11}{15}$ part (6) $\frac{1}{2}$ (7) $33\frac{3}{5}$ kg

Practice Time 4E

- (a) $\frac{1}{11}$ (b) $\frac{7}{3}$ (c) $\frac{5}{3}$ (d) $\frac{9}{4}$ (e) $\frac{19}{14}$ (f) $\frac{20}{9}$
- (g) $\frac{9}{2}$ (h) $\frac{5}{4}$ (i) $\frac{3}{4}$ (j) $\frac{1}{4}$
- (a) $\frac{1}{12}$ (b) $\frac{1}{20}$ (c) $\frac{1}{10}$ (d) $\frac{4}{45}$ (e) $4\frac{1}{5}$ (f) $8\frac{5}{9}$
- (g) 18 (h) 25
- (a) 3 (b) 4 (c) $\frac{2}{3}$ (d) $\frac{1}{2}$ (e) $2\frac{13}{16}$ (f) $1\frac{37}{63}$
- (g) $1\frac{1}{39}$ (h) $\frac{8}{15}$
- $\frac{5}{9}$ m (5) $1\frac{1}{6}$ m (6) ₹120 (7) 8

Mental Maths (Page 96)

- less
- 1
- 16
- less

Challenge Question (Page 97)

- 60
- $27\frac{6}{7}$

Chapter Assessment

- ₹8900
- $6\frac{1}{4}$ pizza
- ₹450
- $5\frac{1}{4}$ pies
- 16 cookies
- ₹16415
- $17\frac{1}{4}$ sq cm
- 42
- $\frac{1}{12}$
- $26\frac{5}{12}$ kg
- $9\frac{1}{6}$ km
- $45\frac{1}{3}$ litres
- $9\frac{9}{25}$ km

Chapter 5. Introduction to Decimals

Practice Time 5A

- (a) $\frac{5}{10}$, 0.5 (b) $\frac{16}{100}$, 0.16 (c) $1\frac{2}{10}$, 1.2
- $1\frac{5}{100}$, 1.05 (e) $2\frac{8}{100}$, 2.08

	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Fractions	$\frac{1}{10}$	$\frac{2}{10}$	$1\frac{3}{10}$	$2\frac{4}{10}$	$3\frac{5}{10}$	$\frac{18}{100}$	$\frac{25}{100}$	$1\frac{51}{100}$	$2\frac{43}{100}$	$5\frac{3}{100}$
Decimals	0.1	0.2	1.3	2.4	3.5	0.18	0.25	1.51	2.43	5.03

Challenge Question (Page 103)

Rishi; $\frac{23}{100}$ or 0.23

Challenge Question (Page 106)

10.3

Practice Time 5B

	Hundreds (100)	Tens (10)	Ones (1)	.	Tenths $\left(\frac{1}{10}\right)$	Hundredths $\left(\frac{1}{100}\right)$
(a)			0	.	1	3
(b)			0	.	0	9
(c)			2	.	3	7
(d)		1	2	.	4	8
(e)	1	0	1	.	7	2

- (a) Zero point zero nine (b) Seven point zero eight
- (c) Thirteen point three seven
- (d) One hundred twenty-eight point seven two
- (a) 0.7 (b) 0.35 (c) 5.4 (d) 2.03 (e) 32.08 (f) 3.11
- (a) 1.7 Place value
 $\begin{array}{l} \text{7 tenths} \\ \text{1 one} \end{array}$
 Expanded form: $1 + 0.7$
- (b) 2.43 Place value
 $\begin{array}{l} \text{3 hundredths} \\ \text{4 tenths} \\ \text{2 ones} \end{array}$
 Expanded form: $2 + 0.4 + 0.03$
- (c) 17.03 Place value
 $\begin{array}{l} \text{3 hundredths} \\ \text{0 tenths} \\ \text{7 ones} \\ \text{1 ten} \end{array}$
 Expanded form: $10 + 7 + 0.0 + 0.03$
- (d) 383.43 Place value
 $\begin{array}{l} \text{3 hundredths} \\ \text{4 tenths} \\ \text{3 ones} \\ \text{8 tens} \\ \text{3 hundreds} \end{array}$
 Expanded form: $300 + 80 + 3 + 0.4 + 0.03$
- (e) 547.77 Place value
 $\begin{array}{l} \text{7 hundredths} \\ \text{7 tenths} \\ \text{7 ones} \\ \text{4 tens} \\ \text{5 hundreds} \end{array}$
 Expanded form: $500 + 40 + 7 + 0.7 + 0.07$
- (a) 4.2 (b) 3.05 (c) 46.52 (d) 200.4

Practice Time 5C

- (a) 0.4 (b) 3.7 (c) 0.09 (d) 0.48 (e) 0.98 (f) 1.96
 (g) 2.13 (h) 1.4 (i) 23.5 (j) 8.07
- (a) $\frac{6}{10}$ (b) $\frac{35}{100}$ (c) $1\frac{2}{10}$ (d) $5\frac{1}{10}$
 (e) $3\frac{9}{10}$ (f) $3\frac{45}{100}$ (g) $9\frac{3}{100}$ (h) $27\frac{2}{10}$
 (i) $26\frac{63}{100}$ (j) $28\frac{4}{100}$

Chapter Assessment

- (a) (iii) (b) (iv) (c) (ii) (d) (ii) (e) (ii)
- (a) - (iv) (b) - (iii) (c) - (ii) (d) - (i)
- (a) Three hundredths (b) 6 tenths
 (c) 3 tenths (d) 9 hundreds
- (a) 65.28 (b) 84.79 (c) 309.05
- E
- Decimal: 0.5, fraction: $\frac{5}{10}$
- Smallest: 12.42, largest: 42.12
- 10 cm

Mental Maths (Page 110)

- (a) 10 (b) (i) $\frac{5}{10}$, 0.5 (ii) $\frac{2}{10}$, 0.2 (iii) $\frac{3}{10}$, 0.3

2.	Ones	.	Tenths	Hundredths	Decimals
(a)	0	.	9		0.9
(b)	5	.	7	6	5.76
(c)	1	.	0	4	1.04
(d)	5	.	4	7	5.47

Challenge Question (Page 111)

- 29.47
- 3.62

Chapter 6: Geometry

LET'S RECALL

- Edge of a pencil, edge of a mobile phone, edge of a blackboard, edge of a book, etc.
- Pizza slices, traffic signs, sandwich slices, nachos, etc.
- Blackboard, top of a table, ruler, playing card, etc.
- Bangles, coins, whole pizza, dart board, etc.

Practice Time 6A

- (a) (i) (b) (iii) (c) (ii)
- (a) point (b) ray (c) line (d) two (e) Intersecting lines
 (f) Parallel lines
- Do it yourself.
- (a) Line AB or $\overleftrightarrow{AB}$ (b) Line QP or $\overleftrightarrow{QP}$
 (c) Line segment ST or $\overline{ST}$ (d) Line EF or $\overleftrightarrow{EF}$
 (e) Intersecting lines AB and CD (f) Parallel lines l and m or $l \parallel m$
 (g) Intersecting lines p and q (h) Parallel lines s and t or $s \parallel t$
- (a) A, P, B, Q (b) l (c) $\overline{AB}$
 (d) $\overline{PA}, \overline{PB}, \overline{PQ}$
- (a) parallel (b) parallel (c) perpendicular
 (d) perpendicular (e) perpendicular (f) coinciding
- $\overline{XY}, \overline{YZ}, \overline{XZ}$

Practice Time 6B

- (b), (d)
- (a) $\angle PQR$ (b) $\angle XYZ$ (c) $\angle LMN$ (d) $\angle EFG$

3.	Arms	Vertex	Name of the angle
(a)	$\overline{OP}, \overline{OT}$	O	$\angle POT$
(b)	$\overline{US}, \overline{UN}$	U	$\angle SUN$
(c)	$\overline{OT}, \overline{OP}$	O	$\angle TOP$

- (a) $\angle AOB, \angle BOC$ and $\angle AOC$
 (b) $\angle RPS, \angle RPT, \angle RPQ, \angle SPT, \angle SPQ$ and $\angle TPQ$
- (a) A, E, B, F, G, C (b) H, I (c) K, J

Practice Time 6C

- (a) 25° (b) 60° (c) 140° (d) 165° (e) 220° (f) 90°
- (a) 65° (b) 110° (c) 90° (d) 105°
- Do it yourself.

Practice Time 6D

- (a) Acute angle (b) Right angle (c) Obtuse angle
 (d) Straight angle
- (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
- (a) Complete angle (b) Right angle
 (c) Straight angle (d) Reflex angle (e) Acute angle
 (f) Reflex angle (g) Right angle (h) Acute angle
- (a) $\angle DEF$ - acute angle (b) $\angle ABC$ - straight angle
 (c) $\angle XYZ$ - Right angle (d) $\angle MNO$ - Reflex angle
- (a) South (b) North (c) East (d) West
 (e) East (f) South (g) South
- (a) $\frac{1}{4}$ (b) $\frac{1}{2}$ (c) $\frac{3}{4}$ (d) full
- Ice Cream Cart

Challenge Question (Page 128)

3

Practice Time 6E

- (a) (iv) (b) (ii) (c) (iv) (d) (ii) (e) (ii)
- (a) Scalene triangle (b) Equilateral triangle (c) Isosceles triangle
 (d) Obtuse-angled triangle (e) Right-angled triangle
 (f) Obtuse-angled triangle

Practice Time 6F

- (a) O (b) AB (c) OA, OB, OP (d) 2
- (a) False (b) True (c) False (d) True
- (a) 5 cm (b) 6 cm (c) 22 mm (d) 16 cm
- (a) 3 cm (b) $\frac{9}{2}$ cm (c) $\frac{23}{2}$ mm (d) 8 mm

Mental Maths (Page 135)

$$\angle ABC = 45^\circ, \angle PQR = 30^\circ, \angle STU = 255^\circ, \angle RST = 120^\circ, \angle DEF = 90^\circ$$

$$\angle PQR < \angle ABC < \angle DEF < \angle RST < \angle STU$$

Challenge Question (Page 135)

$$\left(7\frac{1}{2}\right)^\circ$$

Chapter Assessment

- (a) (iii) (b) (iv) (c) (iv) (d) (i)
- (a) A, B, C, D, O (b) $\overline{OA}, \overline{OB}, \overline{OC}, \overline{OD}$ (any three)
 (c) $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DA}$ (d) $\overline{BD}, \overline{AC}$
- $\overline{AB}, \overline{BC}, \overline{CD}, \overline{DE}, \overline{AC}, \overline{AD}, \overline{AE}, \overline{BD}, \overline{BE}, \overline{CE}$ (any five)
- (a) a and b , a and c , a and r , a and p , a and q , b and r , b and p , b and q ,
 c and p , c and q , c and r , p and r , q and r .
 (b) $b \parallel c$ and $p \parallel q$
- (a) $\angle AOB + \angle BOC$ (b) $\angle AOB + \angle COD$
 (c) $\angle BOC + \angle COD$ (d) $\angle AOB + \angle BOC + \angle COD$
- (a) parallel line: $l \parallel n$, Intersecting lines: l and p , n and p
 (b) parallel line: $q \parallel r$, Intersecting lines: p and q , r and s , p and s
 (c) parallel line: $a \parallel b$, Intersecting lines: a and c , b and c
- (a) $\triangle PQS, \triangle SQR$ and $\triangle PQR$
 (b) $\angle PQR, \angle PQS, \angle SQR, \angle SRQ, \angle PSQ, \angle RPQ, \angle RSQ$
 (c) $\overline{PQ}, \overline{QS}, \overline{QR}, \overline{SR}, \overline{PS}, \overline{PR}$
 (d) $\triangle PSQ$ and $\triangle QSR$

Model Test Paper - 1

- A. 1. (b) 2. (d) 3. (b) 4. (c) 5. (a) 6. (b)
 7. (d) 8. (c) 9. (b) 10. (a)
 B. 1. obtuse 2. equilateral 3. rectangle
 4. $10 + 1 + \frac{1}{10} + \frac{1}{100}$ 5. 23
 C. 1. True 2. False 3. True 4. False 5. True

- D. 1. (a) Lakshadweep (b) Ten lakh fifty-five thousand four hundred fifty
(c) 300000
(d) $12444464 = 10000000 + 2000000 + 400000 + 40000 + 4000 + 400 + 60 + 4$
(e) Mizoram – 1,091,014; Puducherry – 12,444,464; Arunachal Pradesh – 1,382,611; Goa – 1,457,723; Nagaland – 1,980,602
(f) Mizoram (g) 55050
2. $3\frac{79}{81}$ 3. 3 4. A = 5 5. Do it yourself 6. $19\frac{1}{5}$ L
7. (a) ray (b) line (c) ray (d) line segment (e) ray
(f) ray

Chapter 7: Symmetry and Patterns

LET'S RECALL

1. Do it yourself
2. Do it yourself
3. (a) 12, 17, 22, 27, 32, 37, 42, 47 (b) 55, 52, 49, 46, 43, 40, 37, 34
4. (a) ALL IS WELL (b) WORK HARD

Think Tank (Page 142)

1

Practice Time 7A

1. (a) one (b) two (c) three (d) infinite (e) two
2. Do it yourself
3. (a) one (b) two (c) five (d) six (e) infinite
(f) two (g) six (h) two
5. (a) B, C, D, E (b) A, M, T, U, V, W, Y (c) H, I, O, X

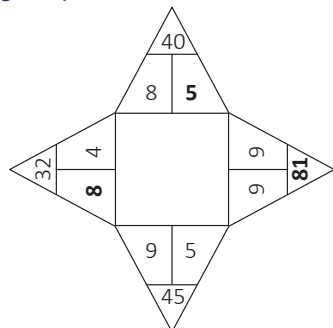
Practice Time 7B

1. (a) flip (b) turn (c) slide (d) flip, turn
(e) turn (f) flip
2. (a) turn (b) slide (c) flip, turn
4. b and c 5. a, c, d
6. (a) None (b) H, I, N, O, S, X and Z
7. (a) $\frac{1}{4}$ turn clockwise or $\frac{3}{4}$ turn anticlockwise
(b) $\frac{1}{4}$ turn anticlockwise or $\frac{3}{4}$ turn clockwise

Practice Time 7C

1. (a) $\frac{1}{4}$ (b) $\frac{1}{4}$ (c) $\frac{1}{2}$ (d) $\frac{1}{2}$
4. (a) $98765 \times 9 + 3 = 888888$, $987654 \times 9 + 2 = 8888888$
(b) $1 + 3 + 5 + 7 + 9 + 11 = 36 = 6 \times 6$,
 $1 + 3 + 5 + 7 + 9 + 11 + 13 = 49 = 7 \times 7$,
 $1 + 3 + 5 + 7 + 9 + 11 + 13 + 15 = 64 = 8 \times 8$
(c) $37 \times 12 = 444$, $37 \times 15 = 555$
(d) $77762223 \div 7777 = 9999$, $777622223 \div 77777 = 99999$
(e) $1234321 \div 1111 = 1111$, $123454321 \div 11111 = 11111$
5. (a) 1, 3, 6, 10, 15, 21, 28, 36, 45, 55.
(b) 4, 7, 10, 13, 16, 19, 22, 25, 28.
(c) 6, 11, 21, 36, 56, 81, 111, 146, 186.
(d) 81, 72, 63, 54, 45, 36, 27, 18.
(e) $2 + 1$, $2 + 5$, $2 + 9$, $2 + 13$, $2 + 17$, $2 + 21$, $2 + 25$
(f) $1 + 2$, $1 + 3$, $1 + 5$, $1 + 7$, $1 + 11$, $1 + 13$, $1 + 17$

Mental Maths (Page 152)



Chapter Assessment

1. (a) (i) (b) (iii) (c) (iii) (d) (ii)
5. 360° 6. CODE, DECIDE, CHOICE, BOX, ICE (answer may vary)
9. (a) $4 + 5 + 6 = 15$, $5 + 6 + 7 = 18$
(b) $(9876 - 4) \div 8 = 1234$, $(98765 - 5) \div 8 = 12345$
(c) $6666 \times 6666 = 44435556$, $66666 \times 66666 = 4444355556$
(d) 29, 24, 19, 14, 9, 4 (e) 15, 30, 45, 60, 75, 90
(f) 107, 98, 89, 80, 71, 62
10. (a) 121 (b) 45
11. 1, 36

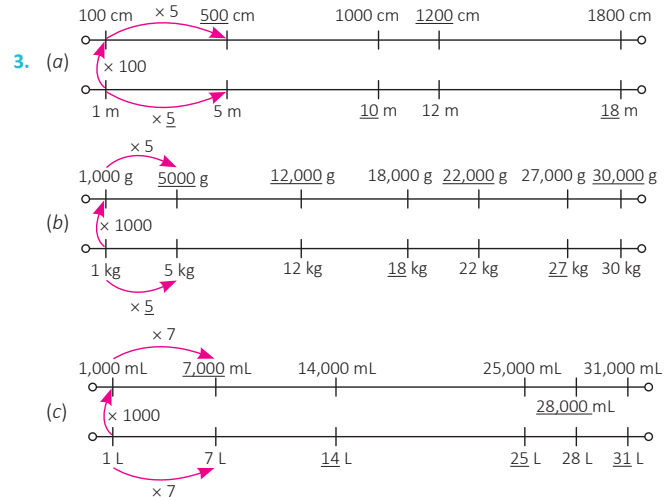
Ch-8: Measurement

LET'S RECALL

1. 305 2. 225000 3. 404.5 4. 41, 00 5. 165, 142
6. 3500

Practice Time 8A

1. (a) 73000 m (b) 1820 mm (c) 39000 m (d) 6 hm
(e) 54,000 g (f) 4500 dag (g) 32 hg 60 g (h) 14 dL 65 mL
(i) 3 kL 808 L
2. (a) 1700 dam (b) 4,40,000 mm (c) 7700 mm (d) 30,000 mm
(e) 27 m (f) 2500 dg (g) 17,200 mg (h) 860 g
(i) 43 dag 26 dg (j) 211 dg 4 cg (k) 134 dL (l) 8 kL
(m) 35,500 cL (n) 26 dL (o) 3,26,00,000 mL



Practice Time 8B

1. (a) 1 dam 1 m 0 dm 6 cm 2 mm (b) 14 kg 2 hg 1 dag 8 g
(c) 15 kL 5 hL 9 daL 1 L (d) 19 km 309 m
(e) 34 g 896 mg (f) 13 L 677 mL
2. (a) 61 kL 6 hL 7 daL 8 L (b) 3 m 0 dm 6 cm 7 mm
(c) 1 kg 8 hg 6 dag 7 g (d) 18 m 50 cm
(e) 54 g 67 mg (f) 69 mL
3. 320 cm 4. 40 kg 125 g 5. 35 L 105 mL

Think Tank (Page 166)

1. 65 km/h 2. 255 km

Mental Maths (Page 167)

1. 190 mm 2. 11 km 400 m 3. 10,005 g 4. 6 kg 800 g
5. 11,930 mL 6. 3 L 300 mL

Chapter Assessment

1. (a) (iii) (b) (iii) (c) (iii) (d) (iii)
2. (a) 52 g 45 cg (b) 630 km 1 hm (c) 32,300 mL (d) 4300 dg
(e) 72,900 mm (f) 947 kL 8 hL
3. (a) 3 kg 737 g (b) 2,57,000 mg
4. 43 kg 108 g 5. 6 km 850 m 6. 335 cm

Chapter 9: Time

LET'S RECALL

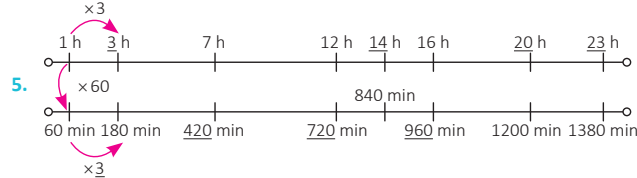
2 hours 20 minutes

Practice Time 9A

- (a) (i) (b) (iii)
- (a) 3:20 a.m. (b) 4:28 a.m. (c) 9:37 a.m. (d) 2:29 p.m.
(e) 1:30 p.m. (f) 5:40 p.m. (g) 6:25 p.m. (h) 12:00 a.m.
(i) 10:22 p.m. (j) 9:38 p.m. (k) 1:48 p.m. (l) 8 p.m.
- (a) 0140 hours (b) 0457 hours (c) 0006 hours (d) 0605 hours
(e) 1024 hours (f) 1936 hours (g) 1215 hours (h) 1417 hours
(i) 2300 hours (j) 2400 hours or 0000 hours (k) 1530 hours
(l) 2140 hours

Practice Time 9B

- (a) 540 seconds (b) 774 seconds (c) 12316 seconds
(d) 840 minutes (e) 594 minutes (f) 216 hours
(g) 211 hours
- (a) 21 minutes 58 seconds (b) 52 minutes 45 seconds
- (a) 3 hours 58 minutes (b) 8 hours 18 minutes
(c) 17 hours 12 minutes (d) 50 hours 24 minutes
- (a) 2 days 9 hours (b) 22 days 9 hours (c) 39 days 17 hours
(d) 75 days 10 hours



Practice Time 9C

- (a) (ii) (b) (i)
- (a) 15 min 44 s (b) 15 h 58 min (c) 6 days 8 hours
(d) 10 weeks 3 days (e) 8 years 11 months
- (a) 9 min 12 s (b) 3 min 7 s (c) 15 h 20 min (d) 2 days 8 h
(e) 1 week 5 days (f) 4 years 3 months
- (a) 12:15 a.m. (b) 2:10 a.m. 5. (a) 9:30 a.m. (b) 7:55 a.m.
- 7 hours 45 minutes
- (a) 5 hours 45 minutes (b) 8 hours 30 minutes
(c) 14 hours 15 minutes (d) 67 hours 50 minutes
(e) 28 years 7 months

Practice Time 9D

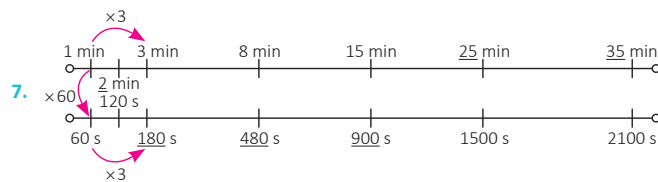
- (a) 111 minutes 36 seconds or 1 hour 51 minutes 36 seconds
(b) 18 hours 15 minutes (c) 48 hours 19 minutes 48 seconds
(d) 57 hours 28 minutes 24 seconds
(e) 8 weeks 1 day (f) 21 weeks 3 days 20 hours
- (a) 5 minutes 16 seconds (b) 4 hours 8 minutes
(c) 4 hours 9 minutes 6 seconds
(d) 13 hours 57 minutes 30 seconds (e) 9 months 19 days
- 8 min 59 seconds

Mental Maths (Page 183)

- (b)
- (a)
- (c)
- (d)

Chapter Assessment

- (a) (iv) (b) (ii) (c) (iv) (d) (iii)
- 21 hours 15 minutes 3. 8 years 3 months 29 days
- 39 days 5. Sophia, 7 years 10 months and 23 days
- 14 minutes 24 seconds



Chapter 10: Money

LET'S RECALL

- (a) ₹153.33 (b) ₹344.34 (c) ₹11,555.2 (d) ₹199.99
- ₹11,450

Practice Time 10A

- (a) ₹9 (b) ₹18 (c) ₹27
- ₹520 3. ₹32, ₹60 4. ₹105 5. ₹500
- ₹162 7. ₹1800 8. ₹25,20,000

Think Tank (Page 189)

₹128

Challenge Question (Page 192)

Profit, ₹1400

Think Tank (Page 193)

No profit, No loss

Practice Time 10B

- (a) (i) (b) (iv) (c) (i) (d) (iii)
- (a) Profit of ₹9.50 (b) Loss of ₹8.75
(c) Profit of ₹317
(d) Loss of ₹13.75
- ₹175
- Gain of ₹64,250

	Selling Price	Profit	Loss	Cost Price
(a)	₹195	—	₹18	₹213
(b)	₹977	₹83	—	₹894
(c)	₹2980	₹105	—	₹2875
(d)	₹8298.25	—	₹1150.75	₹9449
(e)	₹4368	₹1486	—	₹2882
(f)	₹17,672	—	₹1328	₹19,000

- Profit of ₹360
- ₹2780

Challenge Question (Page 194)

₹2400

Mental Maths (Page 194)

	Cost Price (₹)	Selling Price (₹)	Profit/Loss	Amount (₹)
1.	₹1354	₹1005	Loss	₹349
2.	₹21,350	₹23,350	Profit	₹2000
3.	₹7224	₹6724	Loss	₹500
4.	₹9702	₹10,542	Profit	₹840

Challenge Question (Page 195)

₹4.50/egg

Chapter Assessment

- (a) (iii) (b) (ii) (c) (ii)
- Perfume, purse, earrings or purse, sunglasses, earrings (Answer may vary)
- Loss of ₹18 4. ₹25 5. ₹14,500 6. ₹499
- ₹32,500, ₹75,000 8. ₹23,250 9. ₹450 10. ₹830
- Profit of ₹120

Chapter 11: Perimeter and Area

LET'S RECALL

- (a) 48 cm (b) 14.4 cm (c) 12.4 cm
- (a) 12 sq. units (b) 8 sq. units (c) 4 sq. units

Challenge Question (Page 202)

10 m, 8 m

Practice Time 11A

- (a) 26 cm (b) 160 cm (c) 14 m (d) 2100 cm or 21 m
- (a) 24 cm (b) 28 cm (c) 36 m (d) 44 m
- (a) 15 cm (b) 14 cm (c) 18 cm (d) 42 cm
- (a) 18 cm (b) 15 cm (c) 21 cm (d) 30 cm

5. (a)	Length	Breadth	Perimeter of the Rectangle
(i)	4 cm	7 cm	22 cm
(ii)	5 cm	3 cm	16 cm
(iii)	7 cm	5 cm	24 cm
(iv)	18 cm	12 cm	60 cm
(v)	$9\frac{1}{2}$ cm	$5\frac{1}{2}$ cm	30 cm
(vi)	$5\frac{1}{2}$ cm	5 cm	21 cm

(b)

	Side of a Square	Perimeter of the Square
(i)	5 cm	20 cm
(ii)	$12\frac{1}{2}$ cm	50 cm
(iii)	10 cm	40 cm
(iv)	$7\frac{1}{2}$ cm	30 cm
(v)	$22\frac{1}{2}$ m	90 m
(vi)	5 m	20 m

6. 56 cm 7. 27 cm 8. 11 cm 9. 66 m
10. 21 cm 11. 1632 m
12. 77 m, ₹ 8624

Practice Time 11B

1. (a) 240 sq. cm (b) 110 sq. cm (c) 10,560 sq. cm
(d) 72,000 sq. cm
2. (a) 16 sq. cm (b) 4096 sq. cm (c) 7225 sq. cm (d) 36 sq. m

3.

	Length of the Rectangle (cm)	Breadth of the Rectangle (cm)	Area (sq. cm)
(i)	9	4	36
(ii)	50	32	1600
(iii)	23	15	345
(iv)	8	7	56

4. (a) 3 sq. units (b) 6 sq. units
(c) $4\frac{1}{2}$ sq. units (d) $7\frac{1}{2}$ sq. units
5. (a) 7 sq. units (b) 9 sq. units
(c) $7\frac{1}{2}$ sq. units (d) $7\frac{1}{2}$ sq. units
6. 900 sq. m 7. 34 m 8. 480 sq. m
9. (a) 107 sq. cm (b) 168 sq. cm (c) 93 sq. cm
10. ₹ 87,750 11. 11 sq. m

Practice Time 11C

1. 151 sq. units 2. 35 sq. units 3. 56 sq. units 4. 136 sq. units
5. 93 sq. units 6. 150 sq. units

Mental Maths (Page 211)

Area (in sq. units)	15	7.5	18	9	6
Shapes	C, E	F, K	D	A, H, I	B, G, J

Challenge Question (Page 211)

2176 sq. cm

Maths Connect (Page 212)

1. 568 m 2. 15,675 sq. m 3. 12 sq. m 4. 1 sq. m
5. 31,000 sq. m

Chapter Assessment

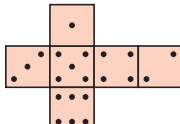
1. (a) (iii) (b) (iv) (c) (ii) (d) (i)
2. 1000 3. 440 metres, ₹ 2640 4. 425
5. ₹ 960 6. 48 cm and 66 sq. cm

Chapter 12: Visualisation of 3D Objects and Maps**LET'S RECALL**

1. (b), (c)

Practice Time 12A

1. (a), (c), (d)
2. (a) – (iii) (b) – (iv) (c) – (i) (d) – (ii) (e) – (v)

3.  4. 6, 5 5. Do it yourself

Challenge Question (Page 222)

25 km

Practice Time 12B

1. (b) Panchkuian Road (c) Underground Parking
(d) 6 blocks, A, B, C, D, E and F
(e) Take the Janpath road and turn right from the outer circle, then take a left turn on Parliament street. Now, take a right turn on Hanuman Road to reach the Gurudwara.
(f) Baba Kharak Singh Marg
2. (a) 3 km (b) 5 km 500 m
(c) Zoya (d) Maya's house
4. (a) – (iii) (b) – (i) (c) – (iv) (d) – (ii)

Challenge Question (Page 226)

50 km

Chapter Assessment

1. (c)
3. (a) Valsad (b) Mehsana (c) Kachchh
(d) South-east
4. (a) 5 cm, 750 m (b) 1 km 200 m
5. (a) (i) Apple (ii) Mango (iii) Papaya (iv) Cherry
(v) Potato (vi) Brinjal
(b) (i) (8, 7) (ii) (1, 4) (iii) (0, 6) (iv) (8, 5)
(v) (3, 1) (vi) (9, 2)

Chapter 13: Data Handling**LET'S RECALL**

1. 20 students 2. Bungee jumping
3. Boating 4. 65 students
5. 5 6. 120 students

Practice Time 13A

1.

Fruits	Tally Marks	Number of fruits
Mango		6
Banana		8
Apple		4
Papaya		9
Orange		10
Grapes		16

2. (a) Dancing and watching TV (b) Reading (c) 3 students
(d) 21 students (e) 4

3.

Car Colour	Tally Marks	Number
Red		7
Green		8
White		10
Blue		5
Yellow		6
Silver		2
Black		2
		Total = 40

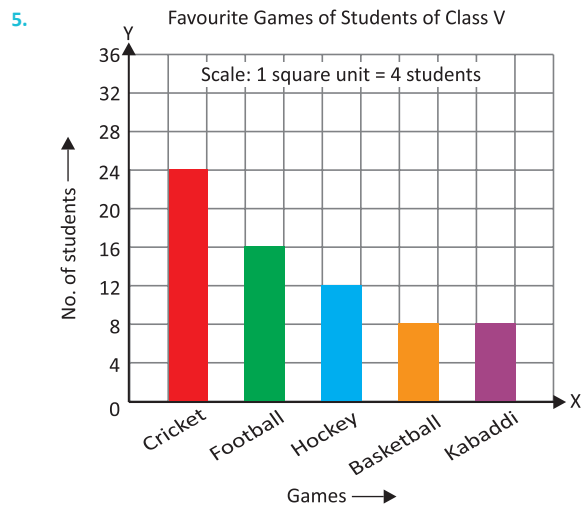
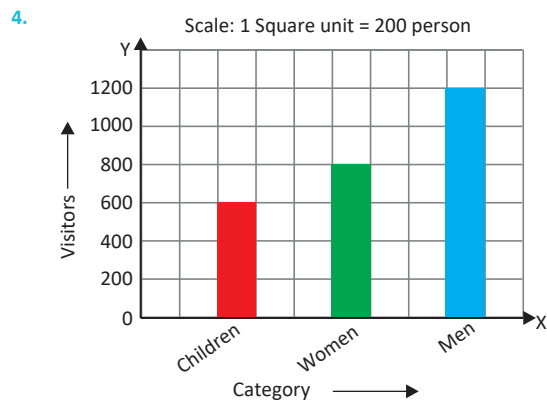
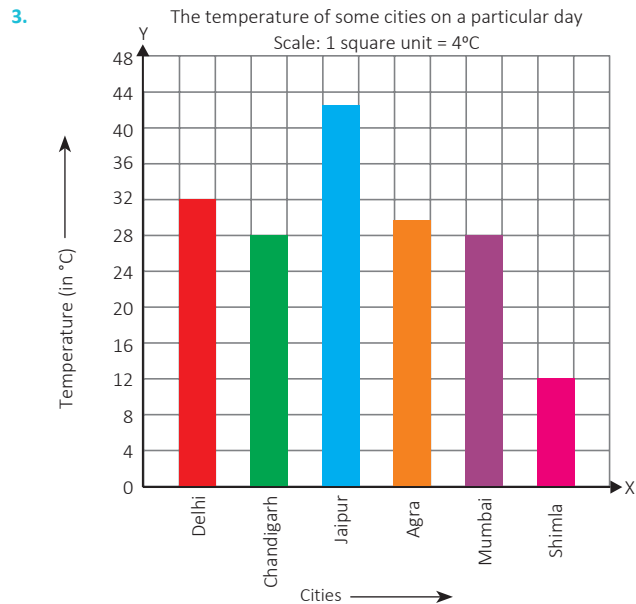
- (a) 10 (b) 8 (c) White

4.

Weight (in kg)	Tally Marks	Number
40		4
43		2
47		4
53		4
55		3
57		3
		Total = 20

Practice Time 13B

- (a) Graph represents the sales of TV sets by a dealer in a particular week.
 (b) 1 square unit = 2 TV sets (c) 16
 (d) Friday and Saturday (e) Sunday (f) 82
- (a) ₹6000 (b) In others expenses (c) ₹20,000
 (d) On education

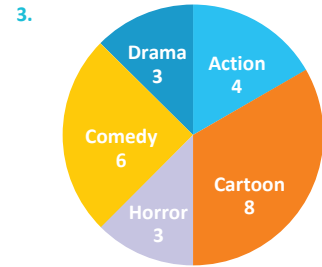
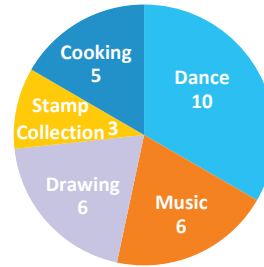


Practice Time 13C

- (a) Spring season (b) $\frac{1}{4}$
 (c) winter and summer (d) Autumn

2.

Hobby	Dance	Music	Drawing	Stamp collection	Cooking
Number of children	10	6	6	3	5
Fraction	$\frac{1}{3}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{10}$	$\frac{1}{6}$



Challenge Question (Page 242)

- 15 children like oranges.
- 160 students

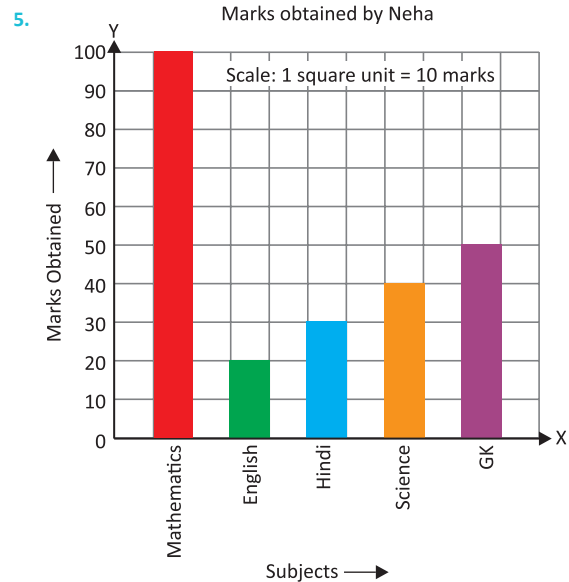
Chapter Assessment

- (a) (iv) (b) (i) (c) (ii)
- (a) data (b) bar graph (c) circle graph (d) Tally marks

3.

Weight (in kg)	Tally Marks	Number
26		2
28		4
30		2
32		4
36		2
40		3
42		3
		Total = 20

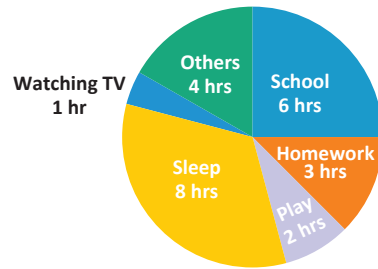
- (a) 15 families have three members.
 (b) 5 people live alone.
 (c) There are 4 members in most families.



6.

Activity	School	Homework	Play	Sleep	TV	Others
Time	6 hours	3 hours	2 hours	8 hours	1 hour	4 hours
Fraction	$\frac{1}{4}$	$\frac{1}{8}$	$\frac{1}{12}$	$\frac{1}{3}$	$\frac{1}{24}$	$\frac{1}{6}$

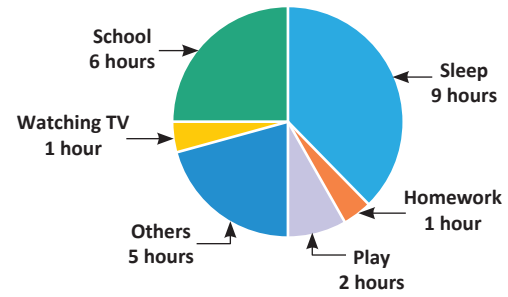
Circle Graph:



Model Test Paper – 2

- A. 1. (a) 2. (c) 3. (c) 4. (c) 5. (b) 6. (b)
 7. (d) 8. (c) 9. (a) 10. (c)
 B. 1. 390 mm 2. 1,50,000 cm 3. loss 4. 120 cm²
 5. Data
 C. 1. Area = 225 sq. m, Perimeter = 70 m 2. ₹7420 3. 31 days

4.



5. 40 carpets
 6. (a) ₹235 (b) ₹930 (c) ₹177 (d) ₹720
 9. (a) $\frac{1}{4}$ turn (b) $\frac{1}{2}$ turn (c) $\frac{1}{4}$ turn (d) $\frac{1}{2}$ turn