

MATH GENIUS

Think Smart, Solve Fast

Ver. 2.0 >



Answer Key

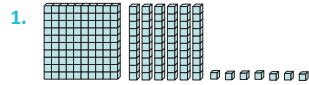
Experience the Joy of Learning Mathematical Skills



ANSWERS

Chapter 1. Numbers up to 9999

LET'S RECALL



1. Nine hundred ninety-eight
2. (a) 1 ten (b) 1 hundred (c) 100 (d) 100 (e) 99

Practice Time 1A

1. (a) 1455 (b) 2033 (c) 3214 (d) 6480
2. (a) 5057 (b) 4102 (c) 3676
3. (a) One thousand three hundred fifty-eight
(b) Two thousand six hundred forty-three
(c) Seven thousand five
(d) Nine thousand seven hundred
4. (a) 2,168 (b) 4,099 (c) 6,411 (d) 5,600

Practice Time 1B

1. (a) (b) (c)
2. (a) Face Value: 3, Place Value: 30 (b) Face Value: 8, Place Value: 800
(c) Face Value: 9, Place Value: 9000
3. (a) 300, 5 (b) 5000, 80 (c) 4, 2 (d) 4, 0, 5
4. (a) 3000 + 900 + 10 + 4 (b) 4000 + 500 + 90
(c) 2000 + 600 + 5 (d) 7000 + 2
5. (a) 4,832 (b) 7,504 (c) 5,617 (d) 9,063

Practice Time 1C

1. (a) 524 < 2193 (b) 7329 > 3279 (c) 8028 < 8208
(d) 2613 < 2631 (e) 9162 > 9126 (f) 9325 = 9325
2. (a) Smallest number: 2513, Largest number: 7346
(b) Smallest number: 2015, Largest number: 7116
(c) Smallest number: 5039, Largest number: 8611
(d) Smallest number: 5001, Largest number: 5101
3. (a) 5146 < 5346 < 5446 < 5846 (b) 857 < 8275 < 8725 < 9814
(c) 9037 < 9073 < 9307 < 9703 (d) 267 < 967 < 2679 < 9672
4. (a) 6873 > 6738 > 6387 > 6378 (b) 8132 > 7093 > 3506 > 239
(c) 3548 > 3458 > 1320 > 1023 (d) 6985 > 6895 > 6598 > 6589

Practice Time 1D

1.	Greatest number	Smallest number
(a)	9,731	1,379
(b)	9,842	2,489
(c)	7,510	1,057
(d)	9,774	4,779
(e)	6,320	2,036

2. (a) 4,852 (b) 9,106

Practice Time 1E

1.	Predecessor	Number	Successor
	5,671	5,672	5,673
	8,790	8,791	8,792
	998	999	1,000
	4,039	4,040	4,041
	4,989	4,990	4,991

2. Odd numbers = 2371, 8903, 3925, 8143, 9465, 2047, 9999.
Even numbers = 4628, 7132, 6000, 3784, 5828, 1116, 1358, 1000
3. (a) 404, 406, 408 (b) 1024, 1026, 1028 (c) 2450, 2452, 2454
4. (a) 113, 115, 117 (b) 1033, 1035, 1037 (c) 4445, 4447, 4449

Think Tank (Page 23)

4

Practice Time 1F

1. (a) 50, 60 (b) 70, 80 (c) 40, 50 (d) 80, 90 (e) 100, 110
2. (a) 20 (b) 40 (c) 90 (d) 30 (e) 50
(f) 50 (g) 40 (h) 60 (i) 80 (j) 80
3. 79, 81, 82, 83 (Answer may vary)
4. 99, 98, 97, 101 (Answer may vary)

Practice Time 1G

1. (a) XVI (b) XXV (c) XXXIX (d) XXVII
2. (a) 18 (b) 29 (c) 37 (d) 34
3. (a) XXVI (b) XXXI (c) XIX (d) IX (e) XIV

Chapter Assessment

1. (a) (iv) (b) (iii) (c) (iv) (d) (i) (e) (iii)
(f) (ii) (g) (ii)
2. (a) 4016 (b) 2039 (c) 2000 (d) 3021
(e) 9998 (f) 8,054 (g) 140
3. (a) One thousand two hundred thirteen
(b) Eight thousand nine hundred twenty-five
(c) Eight thousand eight hundred eighty-eight
(d) Two thousand twenty-three
4. (a) 8,538 (b) 9,800
5. (a) 600 (b) 8000 (c) 70
6. (a) > (b) > (c) <
7. (a) Ascending order = 5008 < 5080 < 5088 < 5800
Descending order = 5800 > 5088 > 5080 > 5008
(b) Ascending order = 7071 < 7107 < 7170 < 7701
Descending order = 7701 > 7170 > 7107 > 7071
8. 0
9. (a) 259, 89 (b) 619, 19 (c) 8561, 3572
10. 7304

11.	Predecessor	Number	Successor
(a)	XXIII	XXIV	XXV
(b)	XXXVI	XXXVII	XXXVIII
(c)	IX	X	XI
(d)	XIV	XV	XVI

Challenge Question (Page 27)

1844

Mental Maths (Page 27)

1. 5555 2. 7086 3. 54
4. 3111 ; 3113 ; 3115 ; 3117 ; 3119

Chapter 2. Addition

LET'S RECALL

1. (a) 128 (b) 917 (c) 485 (d) 339
2. 541

Practice Time 2A

1. (a) 559 (b) 598 (c) 686 (d) 745
2. (a) 779 (b) 799 (c) 797 (d) 789
(e) 687 (f) 897

Think Tank (Page 35)

		182	
	94	88	
46	48	40	
20	26	22	18

Practice Time 2B

- (a) 813, ones (b) 706, tens (c) 900, ones and tens
- (a) 582 (b) 913 (c) 628 (d) 1012 (e) 1688 (f) 1566
- (a) 919 (b) 879 (c) 854 (d) 1030 (e) 1043 (f) 1410

Practice Time 2C

- (a) 6938 (b) 9644 (c) 8967 (d) 5895
(e) 6259 (f) 8077
- (a) 5535 (b) 6977 (c) 8777 (d) 9988
(e) 6979 (f) 7369

Think Tank (Page 39)

- 2000, 1500
- 1000, 800, 500, 1200

Practice Time 2D

- (a) 5994 (b) 7966 (c) 6164 (d) 8140
(e) 7127 (f) 6833
- (a) 1509 (b) 9000 (c) 9700 (d) 9003
(e) 5928 (f) 5510 (g) 8976 (h) 9452
(i) 8334

Practice Time 2E

- 999
- 511
- 9397

Practice Time 2F

- (a) 124 (b) 675 (c) 0 (d) 4679
(e) 1 (f) 4575
- (a) 10 (b) 10 (c) 100 (d) 100
(e) 3139 (f) 1745
- (a) 552 (b) 889 (c) 7245 (d) 4278
(e) 7065 (f) 6843 (g) 3244 (h) 1612
(i) 7283
- (a) 933 (b) 938 (c) 7354 (d) 9508

Maths Fun (Page 43)

- | | | | |
|----------|----------|----------|----------|
| (a) 2885 | (b) 4448 | (c) 7647 | (d) 6409 |
| (e) 9030 | (f) 9913 | (g) 9498 | (h) 8843 |
| (i) 5538 | (j) 6474 | | |

Secret message:

I LOVE MATHS

Practice Time 2G

- Actual Sum = 99 < Estimated Sum = 100
- Actual Sum = 109 < Estimated Sum = 110
- Actual Sum = 83 < Estimated Sum = 90
- Actual Sum = 94 < Estimated Sum = 100
- Actual Sum = 138 < Estimated Sum = 140
- Actual Sum = 128 < Estimated Sum = 130

Think Tank (Page 45)

Estimated sum = ₹190; Neha and her friends have sufficient money to buy the pen.

Practice Time 2H

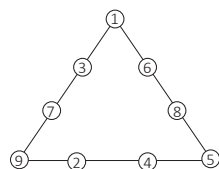
- ₹295
- 1244 flowers
- 5810
- 7117
- 9910
- 420, more than 400

Chapter Assessment

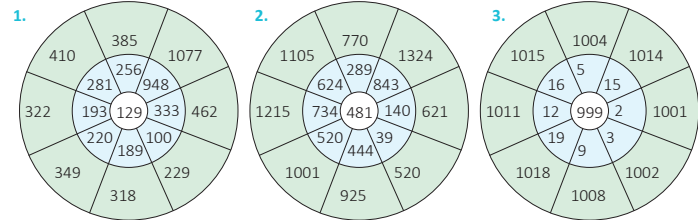
- (a) (i) (b) (iv) (c) (iv) (d) (ii)
(e) (iii) (f) (ii) (g) (i)
- 2040
- ₹5350
- 5745
- ₹4023

Challenge Question (Page 47)

-
- 5, 5



Mental Maths (Page 48)



Chapter 3. Subtraction

LET'S RECALL

- (a) 22 (b) 9 (c) 451 (d) 76
- (a) $79 - 40 = 39$, $79 - 39 = 40$
(b) $275 - 143 = 132$, $275 - 132 = 143$
- (a) 284 (b) 305 (c) 106 (d) 699
- 128 m

Practice Time 3A

- (a) 505 (b) 367 (c) 332 (d) 288
(e) 256 (f) 363 (g) 412 (h) 231
- (a) 192 (b) 586 (c) 238 (d) 292
(e) 81 (f) 228 (g) 282 (h) 222

Practice Time 3B

- (a) 2101 (b) 1 (c) 2118 (d) 829
(e) 2401 (f) 1689 (g) 2676 (h) 3087
- (a) 1673 (b) 3780 (c) 2209 (d) 4582
(e) 7032 (f) 2284 (g) 2786 (h) 2550

Think Tank (Page 58)

- 8991
- 0

Practice Time 3C

- (a) 273 (b) 0 (c) 7364 (d) 574 (e) 1 (f) 277
- (a) 415 (b) 886 (c) 467 (d) 4264 (e) 1645 (f) 4730

Think Tank (Page 59)

40

Practice Time 3D

Actual Difference	Estimated difference
1. 64	70
2. 29	20
3. 73	80
4. 79	70

Think Tank (Page 61)

1.	2.	3.																																				
<table border="1"> <tr><th>H</th><th>T</th><th>O</th></tr> <tr><td>4</td><td>4</td><td>7</td></tr> <tr><td>3</td><td>5</td><td>8</td></tr> <tr><td>0</td><td>8</td><td>9</td></tr> </table>	H	T	O	4	4	7	3	5	8	0	8	9	<table border="1"> <tr><th>H</th><th>T</th><th>O</th></tr> <tr><td>5</td><td>2</td><td>6</td></tr> <tr><td>4</td><td>1</td><td>8</td></tr> <tr><td>9</td><td>4</td><td>4</td></tr> </table>	H	T	O	5	2	6	4	1	8	9	4	4	<table border="1"> <tr><th>H</th><th>T</th><th>O</th></tr> <tr><td>6</td><td>9</td><td>1</td></tr> <tr><td>4</td><td>7</td><td>8</td></tr> <tr><td>2</td><td>1</td><td>3</td></tr> </table>	H	T	O	6	9	1	4	7	8	2	1	3
H	T	O																																				
4	4	7																																				
3	5	8																																				
0	8	9																																				
H	T	O																																				
5	2	6																																				
4	1	8																																				
9	4	4																																				
H	T	O																																				
6	9	1																																				
4	7	8																																				
2	1	3																																				

Think Tank (Page 62)

- 303
- 1244

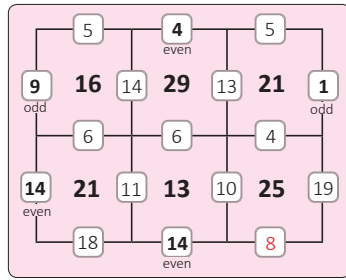
Practice Time 3E

- (a) 2253 (b) 2967 (c) 1865 (d) 5014
(e) 85 (f) 6641
- (a) 291 (b) 287 (c) 2762 (d) 6083
- 1251
- 5825
- 2989

Practice Time 3F

- 117 seats
- 212
- 2986
- 159 packets
- 595 L
- ₹3299
- 3704
- 1058 postcards
- 1788 persons
- ₹328

Mental Maths (Page 64)



Chapter Assessment

- (a) (iv) (b) (ii) (c) (iv) (d) (i)
- (a) 0 (b) 6782 (c) 168 (d) 0
- (a) < (b) > (c) = (d) >
- (a) 4705 (b) 8880 (c) 9856
- 3996 bicycles (b) 1629 marbles (c) 9898
- 5286 people (b) ₹4000 (c) 7492

Challenge Question (Page 66)

- | H | T | O |
|---|---|---|
| 5 | 1 | 5 |
| 3 | 5 | 7 |
| 1 | 5 | 8 |
- $\bigcirc + \triangle - \frown = 20$

Chapter 4. Multiplication

LET'S RECALL

- $4 \times 3 = 12$
- (a) $5 \times 22 = 110$ (b) $5 \times 31 = 155$
- (a) 16 (b) 156 (c) 150 (d) 276

Fast Check (Page 68)

- Multiplicand
- Multiplier
- Product

Practice Time 4A

	Multiplicand	Multiplier	Product
(a)	3	2	6
(b)	4	4	16
(c)	10	5	50

- (a) 12 (b) 27 (c)

10
x 4
40

 (d)

2
x 7
14

 (e)

10
x 9
90

Practice Time 4B

- 68
- 88
- 90
- 466
- 369
- 453
- 966
- 848

Practice Time 4C

- (a) 792 (b) 504 (c) 5552 (d) 2136
- (a) 664 (b) 462 (c) 610 (d) 684 (e) 1630 (f) 3822

Practice Time 4D

- (a) 714 (b) 1764 (c) 1288 (d) 4672 (e) 2448 (f) 7546
- (a) 9288 (b) 7371
- (a) 308 (b) 496 (c) 7308 (d) 8030
- (a) 231 (b) 336 (c) 462

Think Tank (Page 78)

10 and 1000

Practice Time 4E

- (a) 100 (b) 600 (c) 500 (d) 700 (e) 8 (f) 660
- (g) 100 (h) 40 (i) 6
- (a) 864 (b) 445 (c) 144 (d) 504 (e) 512 (f) 492
- (a) 500 (b) 160 (c) 360 (d) 1200 (e) 1240 (f) 800
- (a) 14000 (b) 8000 (c) 8100 (d) 3800 (e) 9300 (f) 1700

Practice Time 4F

- (a) 1 (b) 28 (c) 6 (d) 39 (e) 0 (f) 0
- (a) 112, 112 (b) 371, 371 (c) 672, 672 (d) 280, 280
- (a) 1200, 1320 (b) 300, 364 (c) 1800, 2142 (d) 1200, 1452
- (e) 1200, 1276 (f) 800, 1008 (g) 1400, 1387 (h) 1000, 855

Practice Time 4G

- ₹1150
- 3650
- 4416
- 4860
- 3216
- ₹5950

Mental Maths (Page 81)

- | | | | | |
|-----|---|---------|---|------|
| 3 | x | 3 | = | 9 |
| x | | x | | x |
| 100 | | 15 | | 10 |
| = | | = | | = |
| 300 | | 45 x 90 | = | 4050 |
- | | | | | |
|----|---|---|---|-----|
| 8 | x | 9 | = | 72 |
| x | | | | x |
| 10 | = | 2 | x | 5 |
| = | | | | = |
| 80 | | | | 360 |

Chapter Assessment

- (a) (i) (b) (ii)
- (a) 9 (b) 0 (c) 0 (d) 0 (e) 5
- (f) 1 (g) 7 (h) 4 (i) 7
- (a) 72 (b) 1541 (c) 2628 (d) 3478 (e) 7902
- (a) 8245 people (b) ₹250 (c) 4584 (d) 252

Challenge Question (Page 83)

- | | | | |
|---|----|----|----|
| x | 3 | 5 | 6 |
| 9 | 27 | 45 | 54 |
| 8 | 24 | 40 | 48 |
| 7 | 21 | 35 | 42 |
- | | | | |
|---|----|----|----|
| x | 5 | 6 | 3 |
| 9 | 45 | 54 | 27 |
| 4 | 20 | 24 | 12 |
| 2 | 10 | 12 | 6 |

Chapter 5. Division

LET'S RECALL

- (a) $10 \div 5 = 2$ (b) $18 \div 3 = 6$ (c) $20 \div 4 = 5$
- (a) 5 (b) 7

Practice Time 5A

- (a) $12 \div 2 = 6$ (b) $18 \div 6 = 3$
- (a) $15 \div 3 = 5$ (b) $20 \div 5 = 4$ (c) $36 \div 6 = 6$
- (a) 9 (b) 9 (c) 7 (d) 5
- (a) 8 (b) 5 (c) 4 (d) 5
- (e) 6 (f) 9 (g) 3 (h) 5

Fast Check (Page 89)

One ($49 \div 7 = 7$)

Think Tank (Page 89)

	Dividend	Divisor	Quotient	Division Fact
1.	32	4	8	$32 \div 4 = 8$
2.	63	7	9	$63 \div 7 = 9$
3.	30	3	10	$30 \div 3 = 10$
4.	56	4	14	$56 \div 4 = 14$
5.	60	5	12	$60 \div 5 = 12$

Practice Time 5B

- (a) $4 \times 8 = 32$ (b) $9 \times 6 = 54$ (c) $7 \times 8 = 56$
- $32 \div 8 = 4$ $54 \div 6 = 9$ $56 \div 8 = 7$
- $32 \div 4 = 8$ $54 \div 9 = 6$ $56 \div 7 = 8$

2. (a) $8 \times 5 = 40$ (b) $4 \times 11 = 44$ (c) $6 \times 8 = 48$
3. **Multiplication facts** **Division facts**
 (a) $3 \times 4 = 12$ $12 \div 4 = 3$
 $4 \times 3 = 12$ $12 \div 3 = 4$
 (b) $5 \times 10 = 50$ $50 \div 10 = 5$
 $10 \times 5 = 50$ $50 \div 5 = 10$
 (c) $5 \times 7 = 35$ $35 \div 7 = 5$
 $7 \times 5 = 35$ $35 \div 5 = 7$
 (d) $5 \times 8 = 40$ $40 \div 8 = 5$
 $8 \times 5 = 40$ $40 \div 5 = 8$
4. (a) 43 (b) 0 (c) 1 (d) 1 (e) 1 (f) 38
 5. (a) 4 (b) 4 (c) 7 (d) 6 (e) 3 (f) 3
 (g) 9 (h) 10
 6. (a) 8, 3 (b) 5, 5 (c) 8, 1 (d) 6, 2

Think Tank (Page 93)

1. 48 2. 962

Practice Time 5C

1. Q = 11, R = 1 2. Q = 11, R = 1 3. Q = 22, R = 0
 4. Q = 10, R = 0 5. Q = 111, R = 0 6. Q = 111, R = 1
 7. Q = 101, R = 3 8. Q = 211, R = 1

Think Tank (Page 95)

1.
$$\begin{array}{r} 3 \overline{) 76} \text{ (2 5)} \\ \underline{-6} \\ \text{1 6} \\ \underline{-15} \\ \text{1} \end{array}$$
2.
$$\begin{array}{r} 4 \overline{) 984} \text{ (2 4 6)} \\ \underline{-8} \\ \text{1 8} \\ \underline{-16} \\ \text{2 4} \\ \underline{-24} \\ \text{0} \end{array}$$
3.
$$\begin{array}{r} 7 \overline{) 5749} \text{ (8 2 1)} \\ \underline{-56} \\ \text{1 4} \\ \underline{-14} \\ \text{0 9} \\ \underline{-07} \\ \text{2} \end{array}$$

Practice Time 5D

1. Q = 15, R = 3 2. Q = 17, R = 4 3. Q = 8, R = 3
 4. Q = 16, R = 1 5. Q = 16, R = 1 6. Q = 11, R = 4
 7. Q = 133, R = 5 8. Q = 158, R = 2 9. Q = 158, R = 5
 10. Q = 101, R = 4 11. Q = 78, R = 0 12. Q = 127, R = 2
 13. Q = 64, R = 3 14. Q = 210, R = 1 15. Q = 100, R = 3
 16. Q = 124, R = 2 17. Q = 667, R = 0 18. Q = 605, R = 0
 19. Q = 1316, R = 0 20. Q = 729, R = 7

Think Tank (Page 96)

41 packets and 2 pencils left

Practice Time 5E

	Dividend	Divisor	Quotient	Remainder
1.	50	10	5	0
2.	478	10	47	8
3.	379	10	37	9
4.	1265	100	12	65
5.	4278	100	42	78
6.	8000	100	80	0

Think Tank (Page 97)

₹190

Practice Time 5F

1. 21 2. ₹275 3. 52, 4 4. 104 5. 106 6. 164
 7. ₹147 8. 16, 2 9. ₹142 10. 15, 8

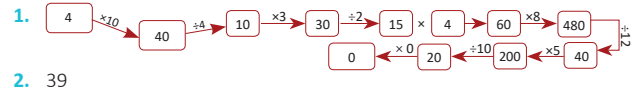
Practice Time 5G

1. -, 13 2. +, 29 3. ×, 40 4. ×, 150 5. ÷, 20

Mental Maths (Page 99)

30

Challenge Question (Page 100)



2. 39

Chapter Assessment

1. (a) (iii) (b) (iii) (c) (ii)
 2. (a) F (b) T (c) F (d) T (e) F
 3. (a) Q = 70, R = 2 (b) Q = 93, R = 3
 (c) Q = 321, R = 2 (d) Q = 111, R = 0
 4. (a) ₹20 (b) 145 (c) 99 trees (d) ₹90
 (e) 484 km (f) 108,1 (g) 6 bananas

Maths Fun (Page 102)

Lion

Chapter 6. Fractions

LET'S RECALL

1. Equal parts – a, c; Unequal parts – b, d.
 2. (a), (b), (d)

Think Tank (Page 107)

$$\frac{4}{11}$$

Fast Check (Page 107)

1. $\frac{10}{25}$ 2. $\frac{15}{25}$

Practice Time 6A



2.

	Figure	Number of shaded parts	Total number of equal parts	Fraction for shaded parts	Fraction for unshaded parts
(a)		3	8	$\frac{3}{8}$	$\frac{5}{8}$
(b)		3	5	$\frac{3}{5}$	$\frac{2}{5}$
(c)		4	8	$\frac{4}{8}$	$\frac{4}{8}$

3. (a) 2 (b) 3 (c) 4 (d) 5
 4. (a) $\frac{2}{10}$ (b) $\frac{5}{8}$ (c) $\frac{4}{5}$ (d) $\frac{3}{7}$
 5. $\frac{1}{6}$
 6. (a) $\frac{4}{8} = \frac{1}{2}$ (b) $\frac{3}{14}$ (c) $\frac{8}{12}$ (d) $\frac{10}{17}$

Fast Check (Page 109)

1. $\frac{2}{4}$ 2. $\frac{2}{5}$ 3. $\frac{6}{9}$

Think Tank (Page 110)

2 parts, $\frac{8}{8}$ parts or a whole

Practice Time 6B

2. (b) $12 \div 2 = 6$ (c) $6 \div 2 = 3$ (d) $14 \div 7 = 2$
 $\frac{1}{2}$ of 12 = 6 $\frac{1}{2}$ of 6 = 3 $\frac{1}{2}$ of 14 = 7

3. (b) $12 \div 3 = 4$ (c) $15 \div 3 = 5$ (d) $6 \div 3 = 2$
 $\frac{1}{3}$ of 12 = 4 $\frac{1}{3}$ of 15 = 5 $\frac{1}{3}$ of 6 = 2
 4. (b) $12 \div 4 = 3$ (c) $16 \div 4 = 4$ (d) $8 \div 4 = 2$
 $\frac{1}{4}$ of 12 = 3 $\frac{1}{4}$ of 16 = 4 $\frac{1}{4}$ of 8 = 2
 5. (a) 18 (b) 21 (c) 13 (d) 20 (e) 17 (f) 18
 6. (a) ₹48, ₹40, ₹15, ₹103 (b) ₹24, ₹60, ₹20, ₹104

Think Tank (Page 113)

Kareem = 6 Marbles, Kavita = 10 Marbles, Anuj = 14 Marbles

Practice Time 6C

1. 10, 7, 3, $\frac{3}{10}$ 2. 16, 9, $\frac{9}{16}$ 3. $\frac{17}{32}$
 4. (a) 9 (b) 6 5. (a) ₹60 (b) ₹30
 6. (a) $\frac{1}{3}$ (b) $\frac{1}{3}$ (c) $\frac{1}{3}$

Mental Maths (Page 114)

1. $\frac{2}{11}$ 2. $\frac{1}{7}$ 3. $\frac{6}{10}$ 4. $\frac{21}{26}$
 5. (a) 6 (b) 15 (c) 4 (d) 4

Chapter Assessment

1. (a) (iii) (b) (i)
 2. (a) $\frac{2}{5}$ (b) $\frac{1}{4}$ (c) $\frac{3}{20}$
 3. (a) 8 (b) 30 (c) 21 (d) 22
 4. (a) 4 (b) 3 (c) 2 (d) 5
 5. $\frac{4}{12}$ 6. $\frac{1}{3}$ 7. Riya = 9, Joe = 12
 8. (a) $\frac{4}{10}$ (b) $\frac{3}{10}$ (c) $\frac{7}{10}$ (d) $\frac{5}{10}$ (e) $\frac{8}{10}$

Challenge Question (Page 116)

Brand	Input	Drained Water	Fresh Water
A	20 L	10 L	10 L
B	24 L	8 L	16 L
C	36 L	9 L	27 L

Model Test Paper – 1

1. (b) 2. (b) 3. (c) 4. (c)
 5. (b) 6. (a) 7. (b) 8. (b)
 9. (b) 10. (c)
 11. (a) addition (b) 999 (c) dividend (d) 448
 (e) 9899 (f) dividend
 12. (a) Ascending order = 2397 < 3267 < 6501 < 8709
 Descending order = 8709 > 6501 > 3267 > 2397
 (b) Ascending order = 3076 < 4093 < 7804 < 9712
 Descending order = 9712 > 7804 > 4093 > 3076
 13. (a) (iv) (b) (iii) (c) (i) (d) (ii)
 14. 2728 = 2 Thousands + 7 Hundreds + 2 Tens + 8 Ones
 + 111 = 0 Thousands + 1 Hundred + 1 Ten + 1 one
2839 = 2 Thousands + 8 Hundreds + 3 Tens + 9 Ones

15.

17	—	7	=	10
—		—		—
6	—	3	=	3
=		=		=
11	—	4	=	7

16. (a) $\frac{3}{7}$ (b) $\frac{4}{7}$
 17. 126
 18. Smallest = 3078 ; Greatest = 8730 ; Difference = 5652
 19. 2030

Chapter 7. Geometry

LET'S RECALL

1. (a) Square or diamond, Two-way traffic (b) Circle, No entry
 (c) Triangle, Left-hand curve
 (d) Rectangle, Electric vehicle charging station

Fast Check (Page 121)

1. Straight path 2. Line segment

Practice Time 7A

1. (b) Line AB, $\overline{AB}$ (c) Line MN, $\overline{MN}$ (d) Ray PQ, $\overrightarrow{PQ}$
 2. (a) 4; $\overline{AB}$, $\overline{BC}$, $\overline{CD}$, $\overline{DA}$ (b) 3; $\overrightarrow{PQ}$, $\overrightarrow{QR}$, $\overrightarrow{PR}$
 (c) 5; $\overline{GH}$, $\overline{HI}$, $\overline{IJ}$, $\overline{JK}$, $\overline{KG}$ (d) 6; $\overrightarrow{EF}$, $\overrightarrow{FG}$, $\overrightarrow{GH}$, $\overrightarrow{HI}$, $\overrightarrow{IJ}$, $\overrightarrow{JE}$
 3. 4; $\overline{AE}$, $\overline{BF}$, $\overline{CG}$, $\overline{DH}$
 4. (a) Ray (b) 6 (c) 1

Think Tank (Page 123)

Yes

Practice Time 7C

1. (a) Circle (b) Triangle (c) Rectangle (d) Square
 2. (a) 8 (b) 13 (c) 14
 3. (a) 3 (b) 3 (c) 7
 4. (a) Square (b) Rectangle (c) Circle (d) Triangle
 5. (a) rectangle (b) triangle (c) circle (d) square
 6. (a) T (b) T (c) F (d) F

Maths Fun (Page 127)

1. 14 2. 15

Fast Check (Page 129)

1. Cuboid 2. Sphere 3. Cone 4. Cylinder

Practice Time 7D

1. (a) Circle (b) Rectangle (c) Square (d) Triangle
 2. (a) Yes (b) No (c) No (d) Yes
 (e) No (f) Yes

Shape of Objects	Number of faces		Number of edges	Number of vertices
	Plane faces	Curved faces		
Cube	6	0	12	8
Cuboid	6	0	12	8
Cone	1	1	1	1
Cylinder	2	1	2	0

4. (a) Top view (b) Side view (c) Front view

Practice Time 7E

1. (a) West (b) North (c) East (d) West

Challenge Question (Page 132)

1. 18

Mental Maths (Page 133)

2. 3 3. Sphere 4. 4

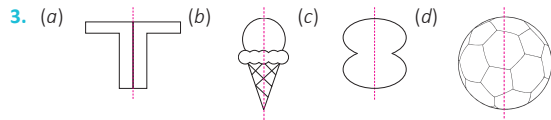
Chapter Assessment

1. (a) (i) (b) (ii) (c) (i)
 2. (a) 5, 1, 2 (b) 18, 3, 1
 3. Water bottles, Dry cell
 4. Ice-cream cone, Birthday cap
 6. (a) Cone (b) Cylinder (c) Cuboid (d) Sphere
 (e) Cube

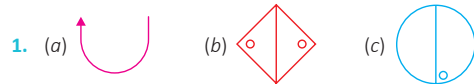
Chapter 8. Symmetry and Patterns

Practice Time 8A

1. (d), (e), (g), (h)



Practice Time 8B



2. (a) 222000 20 2200 222000



4. (a) 220, 270, 320 (b) 141, 151, 161
 (c) Def, Efg, Fgh (d) 1075, 1085, 1095

6. (a) 5 (b) 5

Mental Maths (Page 143)

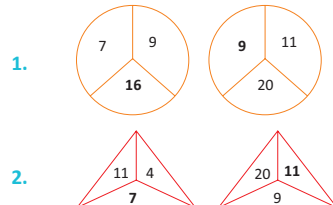
1. floor, chessboard 2. Giraffe (Answer may vary)
 3. (a) 4. R 5.

Chapter Assessment

1. (a) (iii) (b) (i)
 4. (a) D4, E5, F6 (b)



Challenge Question (Page 145)



Chapter 9. Measurement

LET'S RECALL

1. (a) cm (b) cm (c) cm (d) cm (e) m (f) m
 2. (a) g (b) kg (c) g (d) g (e) g (f) g
 (g) g (h) g
 3. (a) 200 mL (b) 5 mL (c) 1 L (d) 10 L
 4. (a) metre (b) kilograms (c) litre (d) centimetres

Think Tank (Page 150)

9 m

Practice Time 9A

1. (a) 7 cm (b) 5 cm (c) 6 cm (d) 4
 2. (a) 500 cm (b) 2000 cm (c) 1218 cm (d) 1510 cm
 3. (a) 6000 m (b) 10,000 m (c) 4300 m (d) 1425 m
 4. (a) 5 m (b) 15 m 62 cm (c) 1 km 610 m (d) 2 km 13 m

Practice Time 9B

1. (a) 7000 g (b) 9000 g (c) 14200 g (d) 59350 g
 2. (a) 3 kg (b) 6 kg (c) 3 kg 124 g (d) 4 kg 128 g

Practice Time 9C

1. (a) mL (b) mL (c) L (d) L
 (e) mL (f) mL
 2. (a) 2000 mL (b) 5000 mL (c) 7000 mL (d) 9000 mL
 3. (a) 4003 mL (b) 3090 mL (c) 2921 mL (d) 7600 mL
 4. (a) 6 L (b) 9 L (c) 3 L 920 mL (d) 4 L 125 mL
 5. (a) 1000, 1 (b) 1000, 1 (c) 1000, 1 (d) Four
 (e) 1 (f) Ten

Think Tank (Page 160)

1. 40 kg 400 g 2. 66 kg 300g

Practice Time 9D

1. (a) 92 m 89 cm (b) 343 m 87 cm (c) 382 km 713 m
 (d) 979 kg 324 g (e) 173 L 313 mL (f) 962 L 424 mL
 (g) 241 km 848 m (h) 77 kg 989 g (i) 532 L 167 mL
 2. (a) 231 km 127 m (b) 436 m 08 cm (c) 366 m 32 cm
 (d) 64 kg 686 g (e) 9 kg 610 g (f) 77 kg 728 g
 (g) 111 L 617 mL (h) 192 L 279 mL
 3. (a) 995 mL (b) 1170 mL

Think Tank (Page 164)

1. Home to shopping mall via temple 2. 4 km

Practice Time 9E

1. (a) 14 km 084 m (b) 519 m 02 cm (c) 50 kg 254 g
 (d) 025 kg 975 g (e) 28 L 022 mL (f) 222 L 105 mL
 2. (a) 820 m 30 cm (b) 322 cm (c) 443 m 84 cm
 (d) 15 m 189 cm (e) 11 kg 394 g (f) 193 kg 577 g
 (g) 96 L 5 mL (h) 33 L 800 mL

Practice Time 9F

1. 3 m 45 cm 2. Kite B, 680 m 3. 57 kg 700 g
 4. Family A, 1 L 125 mL 5. 14 kg 425 g 6. 11 L 450 mL

Mental Maths (Page 169)

1. kg 2. measuring tape
 3. Weighing Machine 4. mL
 5. 22 km 197 m

Chapter Assessment

1. (a) (i) (b) (i) (c) (i) (d) (ii) (e) (i) (f) (iii)
 2. (a) 100 (b) 1000 (c) 2 (d) 3 (e) 1000
 (f) $\frac{1}{1000}$ (g) 1000 (h) 6
 3. (a) 3885 cm (b) 9570 m (c) 4832 mL (d) 3911 m
 4. 208 km 090 m 5. 63 m 30 cm 6. 64 km 652 m
 7. 28 m 11 cm 8. 27 kg 982 g 9. 18 kg 921 g 10. 34 kg 10 g
 11. 17 L 630 mL 12. 238 L 650 mL 13. Rani

Challenge Question (Page 171)

1. (i) 985 km (ii) 389 km (iii) 1347 km
 2. 5L + 3L + 3L

Chapter 10. Time

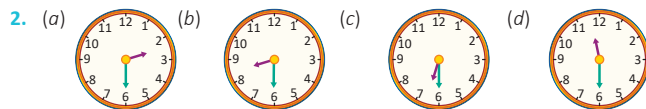
LET'S RECALL

1. (b) 9 O'clock; 9:00 (c) 3 O'clock; 3:00
 (d) 5 O'clock; 5:00 (e) 10 O'clock; 10:00

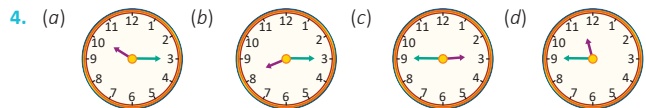
2. (a) minute (b) 15 (c) 30 (d) faster
 3. (a) (iv) (b) (iii) (c) (i) (d) (ii)

Practice Time 10A

1. (b) 4:30; half-past 4 (c) 5:30; half-past 5
 (d) 7:30; half-past 7

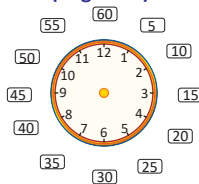


3. (b) 3:15; quarter-past 3 (c) 3:45; quarter to 4
 (d) 7:45; quarter to 8



5. (a) 8:30 (b) 9:15; quarter-past 9
 (c) 10:00; 10 O'clock (d) 10:30; half-past 10
 (e) Thursday; quarter-past 11

Think Tank (Page 178)



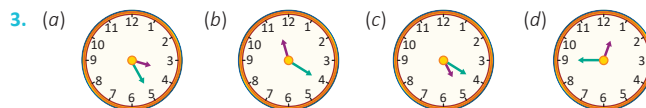
Fast Check (Page 179)

1. 30 minutes past 1, half past 1, 1:30
 2. 8:25 or 25 minutes past 8

Practice Time 10B

1. (b) 25 minutes-past 10 (c) 15 minutes-past 11
 (d) 40 minutes-past 4

2. (a) (i) (b) (iii) (c) (iv) (d) (ii)

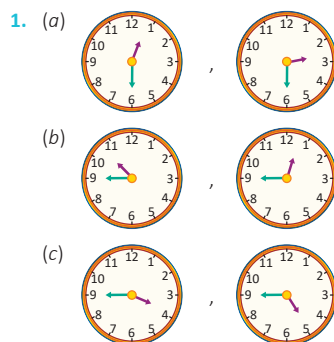


4. (b) 8:15 (c) 9:15 (d) 10:15

Practice Time 10C

2. (a) 6:30 a.m. (b) 5:00 p.m. (c) 7:15 p.m. (d) 8:05 p.m.
 (e) 9:40 a.m. (f) 10:25 a.m.
 3. (a) second (b) minutes (c) hours (d) minute
 (e) minutes (f) hours

Practice Time 10D



2. (a) 5:30 (b) 3:15 (c) 7:00
 3. (a) 9:30 (b) 2:15 (c) 11:45
 4. 2:00 p.m. 5. 7:45 a.m. 6. 12:00 noon
 7. 6:25 p.m. 8. 8:25 p.m.

Practice Time 10E

1. (a) 4 (b) 7 (c) July and August

- (d) 52 (e) March, August, November
 (f) Wednesday (g) Wednesday

2. Leap Years: 1200, 2016, 2024

Maths Connect (Page 186)

15th August, 1947 ; 26th November, 1949 ; 26th January, 1950

Think Tank (Page 187)

1. 12 hours 2. 8 hours 3. 6 hours

Challenge Question (Page 187)

8 years 4 months 23 days

Practice Time 10F

1. (a) 1.4.2003; 1/4/2003 (b) 21.04.2014; 21/04/2014
 (c) 16th November, 2018; November 16, 2018
 2. (a) 120 minutes (b) 480 minutes (c) 24 hours
 (d) 1440 minutes (e) 7200 minutes (f) 133 days
 (g) 168 days (h) 300 days (i) 1460 days

Chapter Assessment

1. (a) (ii) (b) (ii) (c) (i)
 2. (a) (iii) (b) (v) (c) (ii) (d) (i) (e) (iv)
 3. (a) 10 (b) 10 (c) 9 (d) 15
 4. (a) 300 minutes (b) 48 hours (c) 120 days (d) 490 minutes
 5. (a) 4 hours (b) 1 hour 15 minutes (c) 4 hours 15 minutes
 6. 1:15 p.m.
 7. (a) 15/11/2018; Nov. 15, 2018 (b) 16th Nov. 2019; Nov. 16, 2019
 (c) 26/1/2020; 26th Jan. 2020
 9. 9 hours 55 minutes 10. 24 rounds 11. 720 minutes

Challenge Question (Page 193)

1. 29 minutes 2. 17

Chapter 11. Money

LET'S RECALL

1. (a) ₹75 (b) ₹180 (c) ₹275 (d) ₹700
 2. (a) two (b) five (c) five (d) four
 (e) twenty (f) ten (g) ten (h) twenty

Maths Connect (Page 198)

1050.50

Practice Time 11A

1. (a) Thirty rupees fifty paise
 (b) Twenty rupees seventy-five paise
 (c) Hundred rupees ten paise
 (d) One hundred eighteen rupees seventy-five paise
 (e) Five hundred fifty rupees twenty paise.
 (f) Nine hundred ninety-nine rupees twenty paise.
 2. (a) ₹42.25 (b) ₹65.50 (c) ₹100.65 (d) ₹27.70
 (e) ₹1.75 (f) ₹98.90
 3. (a) ₹155.50; One hundred fifty-five rupees and fifty paise
 (b) ₹80.50; Eighty rupees and fifty paise
 (c) ₹702; Seven hundred two rupees.
 (d) ₹500.75; Five hundred rupees and seventy-five paise.
 4. (a) 75 paise (b) 2050 paise (c) 2505 paise (d) 1600 paise
 5. (a) ₹9 (b) ₹5.50 (c) ₹40.01 (d) ₹10
 6. (a) 5 rupees and 69 paise; ₹5.69 (b) 9 rupees and 4 paise; ₹9.04
 (c) 83 rupees and 94 paise; ₹83.94 (d) 3 rupees and 41 paise; ₹3.41

Think Tank (Page 201)

1. Ravi is left with ₹604.25.

Practice Time 11B

1. (a) ₹131.70 (b) ₹120.95 (c) ₹146.35 (d) ₹428.60
 2. (a) ₹258.05 (b) ₹520.25 (c) ₹192.30 (d) ₹110.30
 3. (a) ₹1280.85 (b) ₹1652.40 (c) ₹1530 (d) ₹1222.90
 (e) ₹335.45 (f) ₹132.75
 4. (a) ₹6.50 (b) ₹51 (c) ₹13 (d) ₹49.35
 5. ₹12.50
 6. (a) ₹280 (b) ₹116.25 (c) ₹374 (d) ₹24.50
 (e) ₹47.50

Think Tank (Page 203)

1. ₹500 note 2. ₹2000 note

Practice Time 11C

1. (a) ₹885.60 (b) ₹826 (c) ₹904.50 (d) ₹179.40
 2. (a) 30 paise (b) ₹11 (c) ₹20.73
 3. (a) ₹75 (b) ₹154.50 (c) ₹24.10 (d) ₹180
 (e) ₹25.24

Practice Time 11D

Fashion Bazar				Date: 10/12/20xx
Customer name : Harsha				Bill No. 100
S. No.	Items	Quantity	Cost per item	Total cost
1.	Shirt	2	₹300	₹600
2.	Trouser	3	₹450	₹1350
3.	Skirt	1	₹250	₹250
			Total	₹2200

Chapter Assessment

1. (a) (iii) (b) (ii) (c) (i) (d) (iv)
 2. (a) 50 (b) 2 (c) 5
 3. (a) Eighty-nine rupees sixty-two paise
 (b) Nineteen rupees seventy-nine paise
 (c) Fifty-four paise
 (d) Ten rupees one paisa
 4. (a) ₹7.50 (b) ₹40.80 (c) ₹19.85 (d) ₹30.07
 5. (a) 1240 paise (b) 9975 paise (c) 89 rupees 99 paise
 (d) 9 rupees 90 paise
 6. (a) ₹592 (b) ₹1130.40 (c) ₹180.04 (d) ₹81.90
 (e) ₹6183.75 (f) ₹6205.95 (g) ₹8 (h) ₹10.01
 (i) ₹112
 7. ₹83.40 8. ₹197.10
 9. ₹243 10. ₹73.70
 11. ₹90

Mental Maths (Page 208)

1. (a) 835 paise 2. Twenty
 3. 200-rupee notes – Five
 100-rupee notes – Five

Challenge Question (Page 208)

₹14

Chapter 12. Data Handling**LET'S RECALL**

1. (a) Marigold (b) Jasmine (c) 142 (d) 84
 2. (a) 7 (b) 11 (c) Cartoon
 (d) Musical (e) Action and Comedy

Practice Time 12A

4. (a) 2 students (b) Ice-cream (c) Kheer (d) 52
 5. (a) 6 (b) 4 (c) Relay Race (d) Long Jump
 (e) 23 (f) 3 students

Practice Time 12B

1. (a) 14 (b) Maths (c) 8 students (d) 40
 2. (a) 30 (b) 15 (c) 10 (d) 55 (e) By walk
 3. (a) Maths (b) Art (c) 10 (d) 8 (e) 2

Mental Maths (Page 218)

Badminton = 2, Football = 13, Basketball = 5, Cricket = 5, Hockey = 5

Challenge Question (Page 219)

Riya 2; Priya 3

Chapter Assessment

1. (a) Shikha, 7 (b) 6 (c) Saket and Navneet
 (d) Saransh
 3. (a) Bulldog (b) 53 (c) 13 (d) Pug
 4. (a) 1400 (b) 1600 (c) Wednesday, Thursday
 (d) 600 (e) 4200 (f) 11

Model Test Paper – 2

1. (c) 2. (b) 3. (b) 4. (b)
 5. (b) 6. (b) 7. (b) 8. (a)
 9. (a) 10. (b)
 11. (a) circular (b) 366 (c) 2-D (d) equal
 (e) night (f) morning (g) 0
 13. Cube, 6 14. 77 buttons
 15. 45 minutes 16. 50 km 730 m
 17.

ABC Supermarket				Date: 10/10/20xx
Customer name:				Bill No. 0514
S. No.	Items	Quantity	Rate	Total Price
1.	Biscuits	3 packets	₹15.00	₹45.00
2.	Baked beans	2 bottles	₹45.50	₹91.00
3.	Oranges	5 kg	₹47.00	₹235.00
4.	Potatoes	4 kg	₹12.25	₹49.00
			Total	₹420.00

18. (a) Jolly (b) 49 (c) 322 (d) Nidhi
 19. (a) 25 vehicles (b) 110 vehicles