ADDITIONAL™ PRACTICE

MATHEMATICS 4

Math Magic

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INTERNATIONAL

CONTENTS

Chapter 1 BUILDING WITH BRICKS

1. (i)

2. (ii)

3. (ii)

4. (i)

5. (ii)

6. (ii)

7. (i)

8. Do yourself.

9. (i) Six (ii) Rectangle (iii) 

10. Do yourself

11. Do yourself

12. Do yourself

13. Do yourself

14. (i) Square (ii) Triangle (iii) Rectangle

15. (i) Cost of type I bricks = ₹ 18000

Cost of type II bricks = ₹ 9000

Total cost of both the types of bricks = ₹ 18000 + ₹ 9000 = ₹ 27000

(ii) Cost of 800 bricks = ₹ 6400

Cost of 1 brick = ₹ 6400 ÷ 800 = ₹ 8

Cost of 3000 bricks = 8 × 3000 = ₹ 24000

(iii) Number of bricks required for 5 m height of wall = 500

Number of bricks required for 1 m height of wall = 500 ÷ 5 = 100

Number of bricks required for 80 m height of wall = 80 × 100 = 8000

(iv) Height of 1 brick = 7 cm

Height of 3500 brick = 7 × 3500 = 24500 cm

(v) Cost of 1 brick of type I = ₹ 4

Cost of1 brick of type II = ₹ 6

Total cost of 3000 bricks of each type = 3000 × 4 + 3000 × 6
= 12000 + 18000 = ₹ 30000

16. (i) 5000 (ii) 8000 (iii) 2000 (iv) 2400 (v) 1000

17. (i) Cost of 1000 bricks from Mumbai = ₹ 25000

Cost of 1 brick from Mumbai = 25000 ÷ 1000 = 25

Cost of 1500 bricks from Mumbai = 1500 × 25 = ₹ 37500

(ii) Cost of 1000 bricks from Delhi = ₹ 15000

Cost of 1 brick from Delhi = 15000 ÷ 1000 = 15

Cost of 3000 bricks from Delhi = 3000 × 25 = ₹ 75000

(iii) Cost of 1000 bricks from Kolkata = ₹ 4000

Cost of 1 brick from Kolkata = 4000 ÷ 1000 = 4

Cost of 2500 bricks from Kolkata = 2500 × 4 = ₹ 10000

Cost of 1000 bricks from Ahmedabad = ₹ 6000

Cost of 1 brick from Ahmedabad = 6000 ÷ 1000 = 6

Cost of 2500 bricks from Ahmedabad = 2500 × 6 = ₹ 15000

Total cost = ₹ 10000 + ₹ 15000 = ₹ 25000

(iv) Difference between per thousand cost of bricks from Mumbai and Chennai = ₹ 25000 – ₹ 7000 = ₹ 18000

18. (i) 12 (ii) 1 (iii) 8 (iv) 6 (v) 6 (vi) 6

19. Do yourself.

Chapter 2 LONG AND SHORT

1. (i) m (ii) cm (iii) km (iv) m (v) cm (vi) cm (vii) km (viii) cm (ix) cm

2. Do yourself.

3. Tortoise

4. Do yourself. Measure the given line with scale.

5. (i) (b) (ii) (d) (iii) (d) (iv) (c)

6. **1.** 3 cm **2.** 3 cm **3.** 18 cm **4.** 0

7. (i) False, cm (ii) True (iii) False, cm (iv) False, km (v) False, cm

8. B

9. (ii)

10. Student should tick last figure.

11. Sun

12. Student should tick last figure.

13. Strawberry

14. (i) Cotton cloth = 25 m 78 cm

Silk cloth = 36 m 49 cm

Total cloth = 25 m 78 cm + 36 m 49 cm = 62 m 27 cm

(ii) Cloth required for 1 suit = 8 m 90 cm = 890 cm

Cloth required for 3 such suits = 3 × 890 cm = 2670 cm = 26 m 70 cm

(iii) Distance travelled by car = 169 km 190 m

Distance travelled by bus = 440 km 120 m

Total distance travelled by Megha = 609 km 310 m

(iv) Distance covered by foot = 3 km 75 m

Distance covered by bus = 7 km 190 m

Distance covered by car = 62 km 135 m

Total distance covered = 72 km 400 m

(v) Length of lane = 600 m

Distance between two trees = 40 m

Number of trees planted = (600 ÷ 40) + 1 = 15 + 1 = 16

(vi) A tailor has 16 m 80 cm of cloth.

Cloth required to make 1 shirt = 2 m 6 cm = 206 cm

Cloth required to make 5 such shirts = 5 × 206 cm = 1030 cm = 10 m 30 cm

Length of cloth is left = 16 m 80 cm – 10 m 30 cm = 6 m 50 cm

(vii) Kamini ran 546 m to one direction

Sadhvi ran 696 m to the opposite direction of Kamini

As both ran in opposite directions so distances should be subtracted.

Distance between Kamini and sadhvi = 696 m – 546 m = 150 m

(viii) Total distance covered = 150 m + 250 m + 180 m + 380 m = 960 m

15. (i) 8 (ii) 4.6 (iii) 13.25 cm (iv) 958.27

16. (i) 5 (ii) 60.2 (iii) 1.25 (iv) 7.9

17. (i) 4440 cm (ii) 186.18 m (iii) 56.6 m (iv) 24120 cm (v) 90000 m

18. (i) 41 km 2 m (ii) 1971 cm (iii) 14900 m (iv) 9166 m (v) 36058 cm

19. (i) 8 m 20 cm (ii) 4 m 90 cm (iii) 10 m 45 cm (iv) 7 km 700 m
(v) 14 km 200 m (vi) 12 m 15 cm

20. Do yourself.

21. (i) 1 m 61cm (ii) 1 cm

22. (i) 4 km 800 m (ii) Aseem, 8 km (iii) 1 km 600 m

Chapter 3 A TRIP TO BHOPAL

1. (i) 7836 (ii) 8736 (iii) 8763 (iv) 3876 (v) 3867 (vi) 7683

2.

	Digits	Greatest No.	Smallest No.
(i)	4, 8, 9, 0, 5	**98540**	**40589**
(ii)	7, 5, 1, 2, 3	**75321**	**12357**
(iii)	0, 9, 3	**930**	**309**
(iv)	8, 3, 5, 6	**8653**	**3568**

3. (i) Smallest 2-digit number = 10

Greatest 2-digit number = 99

(ii) Smallest 3-digit number = 100

Greatest 3-digit number = 999

(iii) Smallest 4-digit number = 1000

Greatest 4-digit number = 9999

(iv) Smallest 5-digit number = 10000

Greatest 5-digit number = 99999

4. (i) 0 (ii) 0 (iii) 0 (iv) 6753 (v) 0 (vi) 865 (vii) 1 (viii) 5879

5. Rajat went to his friend's house at 5:30 pm.

His father told him to be back home in 2 h 30 min.

Rajat need to be at home = 5 : 30 + 2 h 30 min. = 8 : 00 pm.

6. (i) Yes, because 2 kg apple cost ₹ 60 and 1 dozen banana cost ₹ 30.

Total cost = ₹ 90

(ii) Yes, because total expenditure = ₹ 450 + ₹ 400 = ₹ 850

(iii) No, because total expenditure = ₹ 1220 + ₹ 1100 + ₹ 100 = ₹ 2420

7. Cost of 2 movie tickets = ₹ 1670

Cost of 2 sodas = ₹ 90

Cost of 2 packets of popcorn = ₹ 175

Total money spent = ₹ 1670 + ₹ 90 + ₹ 175 = ₹ 1935

8. (i) 6890 (ii) 8651 (iii) 6678

9. (i) 72

(ii) Greatest 5-digit number = 99999 and the smallest 4-digit number = 1000

Sum = 99999 + 1000 = 100999

(iii) Smallest 4-digit number = 1000

Greatest 3-digit number = 999

Sum = 1000 + 999 = 1999

(iv) (4 – 3) + (4 – 3) + (4 – 3) + (4 – 3) + (4 – 3) = 1 + 1 + 1 + 1 + 1 = 5

i.e. total time = 2 × 5 = 10 minutes

(v) Greatest 5-digit number = 99999

Smallest 2-digit number = 10

Difference = 99999 – 10 = 99989

(vi) Number of toffees distributed by teacher = 4 × 40 = 160

Number of toffees left with teacher = 10

Total number of toffees teacher has at the start = 160 + 10 = 170.

10. (i) On 15 L of petrol a car runs = 25 km

On 1 L of petrol the car runs = 25 ÷ 15 = 5/3 km

On 10 L of petrol the car runs = 5/3 × 10 = 50/3 km.

(ii) Time when Megha came back from the school = 6 : 30 + 2 h + 5 : 30

= 14 :00 or 2 : 00 pm

(iii) The rent of a house for 12 months = ₹ 4800

Rent of house for 1 month = ₹ 400

Rent for 3 months = 3 × 400 = ₹ 1200

(iv) Total length of ribbon = 28

She needs to cut it into ribbons of length 4 m each

Number of pieces = 28 ÷ 4 = 7 m

(v) Number of ₹ 10 notes = 3150 ÷ 10 = 315

11. 1,00,00 – 96,954 = 4046

12. Total quantity of gas $14\frac{3}{5}$ kg

Used quantity of gas $7\frac{5}{2}$ kg

Gas left in the cylinder = $14\frac{3}{5} - 7\frac{5}{2} = \frac{73}{5} - \frac{19}{2} = \frac{146-95}{10} = \frac{51}{10} = 5.1$ kg

13. Total expenditure = ₹ 30 + ₹ 180 + ₹ 15 = ₹ 225

14. (i) Total cost = 2 × ₹ 40 + 2 × ₹ 90 + ₹ 30 = ₹ 80 + ₹ 180 + ₹ 30 = ₹ 290

(ii) Total cost = ₹ 70 + ₹ 45 + ₹ 90 = ₹ 205

15. (i) (c) (ii) (d) (iii) (b) (iv) (a) (v) (d) (vi) (d) (vii) (c)
(viii) (a) (ix) (a) (x) (d) (xi) (a)

Chapter 4 TICK-TICK-TICK

1. (i) 12 : 38 pm (ii) 00 : 45 am (iii) 12 : 00 pm

2. (i) 12 : 00 pm (ii) 12 : 00 am
(iii) 05:05 pm (iv) 09 : 00 am

3. Do yourself. Draw hands of clock.

4.

	12 h clock	**24 h clock**
(i)	01 : 45	13 : 45
(ii)	06 : 30	18 : 30
(iii)	06 : 05	18 : 05
(iv)	03 : 10	15 : 10
(v)	10 : 40	22 : 40
(vi)	08 : 20	20 : 20

5. (ii) 04 : 00 (iii) 03 : 45 (iv) 04 : 15

6. (i) 30, 9 (ii) 3 (iii) 28, 6 (iv) 3 (v) 45

7. (i) 75 minutes (ii) 70 minutes (iii) 45 minutes (iv) 35 minutes

8. (i) (b) (ii) (d) (iii) (a) (iv) (a) (v) (c) (vi) (c) (vii) (d)

9. Do yourself.

10. (i) ↔ (c) (ii) ↔ (b) (iii) ↔ (a) (iv) ↔ (d) (v) ↔ (e)

11. (a) (i) 13 : 40 (ii) 4 : 40 (iii) 1 hour
(b) (i) 12 : 30 (ii) 4 : 50 (iii) 4 hours 20 minutes

12. (i) 9 : 10 (ii) 6 : 00 (iii) 11 : 05

13. (i) 3 : 00 (ii) 2 : 20 (iii) 12 : 40 (iv) (a) (v) 10 : 17
(vi) 1 : 27 (vii) 11 : 46

14. (a) 05:00 (b) 18:50 (c) 13:45 (d) 1:15
(e) 12 : 00 (f) 24 : 00 (g) 10:10 (h) 22 : 40

15. (i) 29 days (ii) 35 days
(iii) 63 days (iv) 17 days
(v) 61 days (vi) 28 days
(vii) 12 days (viii) 34 days

16. (i) Eight september two thousand seven
(ii) Sixteen june two thousand twelve
(iii) Thirteen march two thousand three
(iv) One may two thousand eleven
(v) Twenty nine february two thousand sixteen

17. (i) 3rd November 2015 (ii) 8th August 2015
(iii) 1 January 2016 (iv) 8 March 2015
(v) 3 June 2015 (vi) 12 January 2014
(vii) 26 January 2016 (viii) 26 May 2015
(ix) 15 January 2015 (x) 25 November 2015

18. (i) 6 : 55 am
(ii) 7 : 25
(iii) 11:35 am
(iv) Boy by 7 years 3 months 3 weeks and 2 days
(v) 1 hour 55 minutes
(vi) 6 : 00 pm
(vii) 3 hours 40 minutes
(viii) 24 days
(ix) She can use as expiry date will be 15th December 2019.
(x) 7 : 38 pm
(xi) 19 May

19. (a) 36 minutes (b) 41 minutes
(c) 41 minutes (d) 1 hour 14 minutes
(e) 1 hour 14 minutes (f) 1 hour 14 minutes

20. (i) 9 days (ii) 15th February

21. (i) 10/04/2016 (ii) 8/12/2018
(iii) 16/06/2017

Chapter 5 THE WAY THE WORLD LOOKS

1. (i) (b) (ii) (c) (iii) (a) (iv) (a) (v) (b) (vi) (a)
2. 4
3. (i) False (ii) False (iii) False (iv) True (v) False
4. 30
5. Do yourself.
6. (i) ↔ (c) (ii) ↔ (a) (iii) ↔ (b)
7. 30
8. (i) West (ii) South (iii) No (iv) South (v) Four
(vi) Three (vii) East (viii) South
8. Do yourself.

Chapter 6 THE JUNK SELLER

1. (i) ₹ 500 (ii) ₹ 80 (iii) ₹ 100 (iv) ₹ 750 (v) ₹ 120 (vi) ₹ 16000
(vii) ₹ 48 (viii) ₹ 5500
2. (i) (a) (ii) (d) (iii) (c) (iv) (d) (v) (b) (vi) (c)
(vii) (b) (viii) (c) (ix) (c)
3. (i) 4 (ii) 29 (iii) 8 (iv) 70
4. (i) (a) (ii) (b) (iii) (b) (iv) (a) (v) (a) (vi) (d)
5. (a) 7 × 73 = ₹ 511 (b) 6 × 73 = ₹ 438
(c) 89 × 73 = ₹ 6497 (d) 17 × 7 × 73 = ₹ 8687
6. (i) ₹ 100 (ii) ₹ 220
(iii) ₹ 460 (iv) ₹ 120
7. (i) Shopkeeper earns in 1 day = ₹ 650
Shopkeeper earn in 15 days = 15 × 650 = ₹ 9750
(ii) Total cost of handbag and sandals is ₹ 35.50 + ₹ 280.90 = ₹ 316.40
She gave ₹ 500 note to the shopkeeper.
She get back = ₹ 500 – ₹ 316.40 = ₹ 483.60
(iii) Raina have ₹ 995.50 – ₹ 225.50 = ₹ 770
(iv) Nilesh paid = 8 × 650 = ₹ 5200
Rahul paid = ₹ 5100
Therefore, Nilesh paid more by ₹ 100.

(v) 2 chocolates cost = ₹ 50

1 chocolate cost = ₹ 25

For ₹ 250, number of chocolates = 250 ÷ 25 = 10

(vi) The cost of 8 movie tickets = ₹ 400

Cost of one movie ticket = 400 ÷ 8 = ₹ 50

(vii) Cost of 6 notebooks = 6 × 60 = ₹ 360

Cost of 3 rulers = 3 × 6.5 = ₹ 19.5

Cost of 12 pencils = 12 × 3 = ₹ 36

Cost of geometry box = ₹ 98

Total cost = ₹ 360 + ₹ 19.5 + ₹ 36 + ₹ 98 = ₹ 503.5

(viii) Total cost = ₹ 1200 + ₹ 1100 + ₹ 150 = ₹ 2450

He gives ₹ 2500 to the shopkeeper.

He will get back ₹ 2500 – ₹ 2450 = ₹ 50

(ix) Money he needed to save = ₹ 10000 – ₹ 9395 = ₹ 605

8. 1. ₹ 20 2. ₹ 600 3. ₹ 520 4. ₹ 228 5. ₹ 23

9. (i) (a) ₹ 86.50 (b) ₹ 60.70

(c) ₹ 435.55 (d) ₹ 601.10 (e) ₹ 801

(ii) (a) ₹ 37.70 (b) ₹ 11.10

(c) ₹ 198.55 (d) ₹ 390.70 (e) ₹ 344.60

10. Total cost = ₹ 20 + ₹ 30 + ₹ 10 + ₹ 30 + ₹ 40 = ₹ 130

11. (i) ₹ 50 (ii) ₹ 560 (iii) ₹ 1650 (iv) ₹ 180 (v) ₹ 2400

12. (i) False, he earned ₹ 42 – ₹ 38 = ₹ 4

(ii) False, he loose ₹ 100 – ₹ 98 = ₹ 2

(iii) True, he earned ₹ 39500 – ₹ 38000 = ₹ 1500

(iv) False, 2 kg rice cost = 2 × 48 = 96

He earne = ₹ 96 – ₹ 90 = ₹ 6

(v) True, cost price of 2 kg Rajma = 2 × ₹ 120 = ₹ 240

Selling price of 2 kg Rajma = 2 × ₹ 124 = ₹ 248

13. Maggi cost = ₹ 30

She gave ₹ 175 to the cashier.

So, 175 ÷ 30 , Quotient = 5 and Remainder = 25

She can get 5 plates o maggi and left with ₹ 25

14. Bill paid by him = 2 × ₹ 50 + 2 × 15 = ₹ 100 + ₹ 30 = ₹ 130

15. (ii) 9 × 268

	100	**100**	**60**	**8**	**Total**
9	9 × 100	9 × 100	9 × 66	9 × 8	
	900	900	540	72	2412

(iii) 5 × 407

	100	100	100	100	7	Total
5	5 × 100	5 × 100	5 × 100	5 × 100	5 × 7	
	500	500	500	500	35	2035

16. (i) 44 (ii) 175 (iii) 220 (iv) 208 (v) 80 (vi) 96 (vii) 1800 (viii) 3800

17. (ii) 400 (iii) 2500 (iv) 800

Chapter 7 JUGS AND MUGS

1.

Unit	Value	Unit	Value
kl	1000 *l*	*hl*	100 *l*
dal	10 *l*	*l*	1 *l*
cl	0.01 *l*	*ml*	0.001 *l*

2. (i) (a) 6000 (b) 9250 (c) 24750 (d) 48040 (e) 12190 (f) 50450 (g) 10000

(ii) (a) 7 *l* (b) 4 *l* 650 m*l*

(c) 8 *l* 450 m*l* (d) 13 *l* 540 m*l*

(e) 4 *l* 575 m*l* (f) 87 *l* (g) 94 *l* 560 m*l*

3. (a) 1 (b) 2500 (c) 500 (d) 500 (e) 100 (f) 6

4. (i) (c) (ii) (a) (iii) (a) (iv) (a) (v) (a)

5. (i) *l* (ii) *ml* (iii) *l* (iv) *ml* (v) *l*

6. (i) 5 (ii) 10 (iii) 2 (iv) 20 (v) (a)

7. (i) 2000 (ii) 5000

8. (i) 100 (ii) 50 (iii) 200 (iv) 500 (v) 100

9. (i) Number of bottles required for 24 litres = 24000 ÷ 300 = 80

(ii) Capacity of the glass = 14000 ÷ 35 = 400 ml

(iii) Amount of milk required = 50 × 80 = 4000 ml = 4 *l*

(iv) On the next day 55 *l* 850 m*l* + 27 *l* = 82 *l* 850 m*l*

(v) Cold drink left in the bottle = 2000 ml – 350ml – 500 = 1150 ml

(vi) Detergent left = 1 *l* 300 m*l* – 300 m*l* = 1*l* = 1000 m*l*

(vii) Oil is left in the tin = 18 *l* –7 *l* = 11 *l*

(viii) Consumption of milk for next ten months = 40 *l* × 10 = 400 *l*

(ix) Milk is left with Mrs Sahni = 16 *l* 500 m*l* – 9 l 450 m*l* = 7 l 50 m*l*

10. (i) False (ii) False (iii) True (iv) True (v) False

Chapter 8 CARTS AND WHEELS

1. Coin, Wheel, Moon

2. Do yourself.

3. Do yourself.

4. (i) (b) (ii) (a) (iii) (b)

5. (i) centre (ii) longest (iii) circumference (iv) 2 (v) protractor

6. (i) Centre (ii) Radius (iii) Radius (iv) Radius (v) Chord

7. (i) OP, OQ, OR, OS (ii) PQ (iii) AB, CQ

8. Do yourself.

9. Diameter = 2 × radius = 2 × 7 = 14 cm

10. Radius = Diameter ÷ 2 = 12 ÷ 2 = 6 cm

11. Do yourself.

12. Do yourself.

13. (i) False (ii) True (iii) False (iv) False

14. (i) (b) (ii) (c) (iii) (c) (iv) (d)

Chapter 9 HALVES AND QUARTERS

1. (i) (a) (ii) (b) (iii) (b) (iv) (c) (v) (a) (vi) (c) (vii) (b) (viii) (c)

2. Do yourself.

3. Do yourself.

4. Do yourself.

5. (a) $\frac{4}{7}$ (b) $\frac{7}{15}$ (c) $\frac{11}{15}$ (d) $\frac{5}{8}$

6. (a) $\frac{2}{3}$ (b) $\frac{3}{4}$ (c) $\frac{1}{9}$ (d) $\frac{6}{10}$

7. (a) 11 (b) 12 (c) 1 (d) $\frac{1}{4}$

8. (a) $\frac{1}{8} < \frac{3}{8} < \frac{5}{8} < \frac{7}{8}$ (b) $\frac{5}{17} < \frac{8}{17} < \frac{11}{17} < \frac{17}{17}$

9. (a) $\frac{5}{6} > \frac{4}{6} > \frac{3}{6} > \frac{2}{6}$ (b) $\frac{8}{9} > \frac{7}{9} > \frac{5}{9} > \frac{3}{9}$

10. Bhavika

11. There are 24 ÷ 4 = 6 lollipops

12. (a) 20 (b) 25 (c) 15 (d) 30

13. (a) > (b) = (c) = (d) < (e) = (f) =

14. (a) 20 (b) 36 (c) 25 (d) 30

15. (a) 600 (b) 300

16. (i) ₹ 9.5 + ₹ 20 + ₹ 63 = ₹ 92.5

(ii) Onion

(iii) ₹ 12

17. Do yourself.

18. I ↔ (ii) ↔ (b) II ↔ (i) ↔ (a) III ↔ (iii) ↔ (d)

IV ↔ (iv) ↔ (c)

19. (i) $\frac{3}{4}$ *l* of milk of bottle I is left, means $\frac{1}{4}$ *l* of milk is distributed in 4 small bottles.

Each small bottle contain $\frac{1}{4} \times \frac{1}{4}$ = 1/16 *l*

$\frac{1}{4}$ *l* of milk of bottle II is left, means $\frac{3}{4}$ *l* of milk is distributed in 2 small bottles.

Each small bottle contain $\frac{1}{2} \times \frac{3}{4} = \frac{3}{8}$ *l*

(ii) Total quantity used = $\frac{1}{4} + \frac{3}{4}$ = 1 *l*

20. (i) 1 kg + 500 g + 500 g + 500 g + 500 g

(ii) 500 g, 250 g + 250 g

21. (i) Total number of balls = 80

Number of red balls = $\frac{3}{4} \times 80 = 60$

Number of balls which are not red = 80 – 60 = 20

(ii) Total number of dolls = 16

Number of dolls having brown hair = $\frac{3}{4} \times 16 = 12$

Number of balls which are not red = 16 – 12 = 4

(iii) Total number of balls = 80

Number of red balls = $\frac{3}{4} \times 80 = 60$

Number of balls which are not red = 80 – 60 = 20

(iv) No

(v) Total amount = ₹ 50 + ₹ 20 + 2 × ₹ 10 = ₹ 90

Amount given by Rimjhim is not enough for pizza.

(vi) Number of people who wants Butter Scotch = $\frac{1}{7} \times 42 = 6$

(vii) Number of black and white cows = $\frac{1}{3} \times 42 = 14$

Number of cows who are not black and white = 42 – 14 = 28

(viii) Number of books for school = $\frac{8}{9} \times 18 = 16$

Number of books not for school = 18 – 16 = 2

(ix) Number of Blue pencils = $\frac{4}{7} \times 63 = 36$

Number of pencils which are not blue = 63 – 36 = 27

22. (a) 6 (b) 7 (c) 11 (d) 8

23. (a) $\frac{2}{4}, \frac{3}{6}, \frac{4}{8}$ (b) $\frac{2}{8}, \frac{3}{12}, \frac{4}{16}$

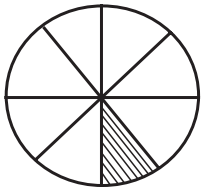
(c) $\frac{6}{8}, \frac{9}{12}, \frac{12}{16}$

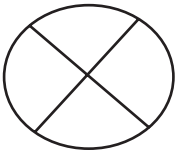
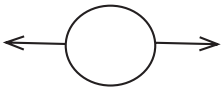
Chapter 10 PLAY WITH PATTERNS

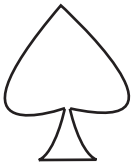
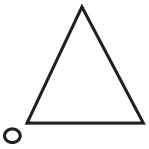
1. (a) (6) + (6) + (16)

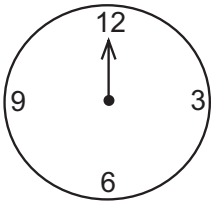
(b) △6 + △6 + △6 + △6

(c) [10] + [10] + [10]

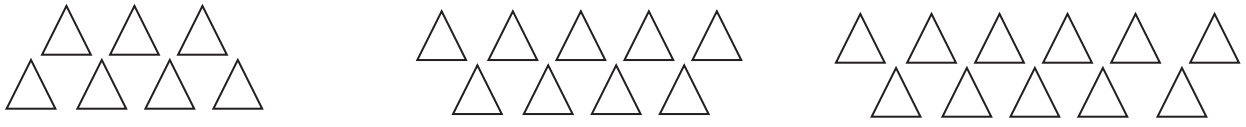
2. (a)  (b) 

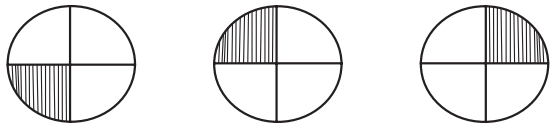
(c)  (d) 

(e)  (f) 

(g)  (h) 

4. (i) ●●●●●●●● ●●●●●●●●●● ●●●●●●●●●●●●

(ii) 

(iii) 

(iv) 

(v) GH IJ KL

(vi) W23 V22 U21

(vii) 

(viii) 2ID 20E 19F

5. 19, 11, 13

6. (i) 540, 640, 740 (ii) 100, 50, 0

(iii) 20 (iv) 18, 21

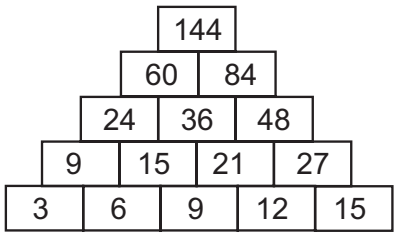
(v) 185, 250 (vi) 770, 1250, 2020

(vii) 488, 484, 480

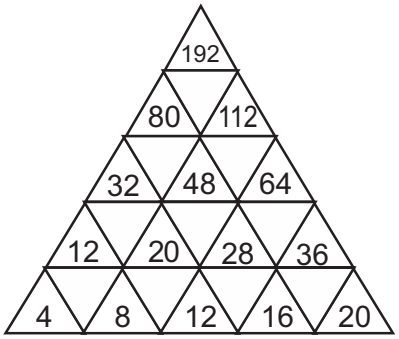
7. (a) (i) (b) (iii) (c) (ii) (d) (ii) (e) (ii) (f) (ii) (g) (iii) (h) (iii) (i) (i)

8. (i) 60 (ii) 59 (iii) 55 (iv) 56

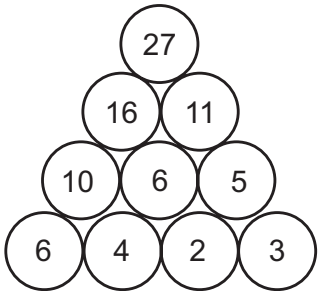
9. (a)



(b)



(c)



(d)

5	10	15	20
25	30	35	40

10. (i) ↔ (b) (ii) ↔ (a) (iii) ↔ (c)

11. (a) 5 10 **15** 20 **25** 30 **35** **40** 45 50

(b) **7** **14** 21 **28** **35** **42** **49** 56 63 **70**

(c) **9** **18** **27** **36** 45 **54** 63 **72** 81 90

Chapter 11 TABLES AND SHARES

1. (ii) 5 + 5 + 5 + 5 + 5 = 25

5 × 5 = 25

(iii) 6 + 6 + 6 + 6 + 6 + 6 = 36

6 × 6 = 36

(iv) 4 + 4 + 4 = 12

4 × 3 = 12

(v) 6 + 6 + 6 + 6 = 24

6 × 4 = 24

2. (ii) 49 – 9 – 9 – 9 – 9 – 9 = 0

45 ÷ 9 = 5

(iii) 49 – 7 – 7 – 7 – 7 – 7 – 7 – 7 = 0

49 ÷ 7 = 7

(iv) 70 – 7– 7 – 7 – 7 – 7 – 7 – 7 – 7 – 7 – 7 = 0

70 ÷ 7 = 10

(v) 98 – 14 – 14 – 14 – 14 – 14 – 14 – 14 – 14 = 0

98 ÷ 14 = 7

3. (ii) 6 + 6 + 6 + 6 + 6

(iii) 9 + 9 + 9 + 9 + 9 + 9 + 9

(iv) 10 + 10 + 10 + 10 + 10

(v) 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7 + 7

4. (i) 105 (ii) 77 (iii) 76 (iv) 1600 (v) 750 (vi) 820

5. (ii) 35 = **7** × 5 = 7 × **5**

(iii) 124 = 2 × **64** = 4 × **32**

(iv) 440 = 11 × **40** = 40 × **11**

(v) 128 = 4 × **32** = 16 × **8**

(vi) 72 = 6 × **12** = 3 × **24**

6. (i) 550 (ii) 450 (iii) 7700 (iv) 100 (v) 100 (vi) 1000

7. (i) One dozen banana = 12 bananas

5 dozens bananas = 5 × 12 = 60 bananas

(ii) Number of seats in 1 row = 150

Number of seats in 500 rows = 500 × 150 = 75000

(iii) Number of pastries in 1 row = 6

Number of rows in a box = 5

Total number of boxes = 20

Total number of pastries = 6 × 5 × 20 = 600

(iv) Total number of students = 640

Each student donates = ₹ 160

Total sum donated = 640 × 160 = ₹ 102400

(v) Number of erasers in 1 box = 24

Number of boxes = 10

Total number of erasers = 10 × 24 = 240

8. (i) 10 (ii) 7 (iii) 9 (iv) 139 (v) 10 (vi) 21

9. (i) repeated (ii) 1/2 (iii) 0 (iv) 1 (v) 110

10.

	10	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
1	10	11	12	13	14	15	16	17	18	19	20
2	20	22	24	26	28	30	32	34	36	38	40
3	30	33	36	39	42	45	48	51	54	57	60
4	40	44	48	52	56	60	64	68	72	76	80
5	50	55	60	65	70	75	80	85	90	95	100
6	60	66	72	78	84	90	96	102	108	114	120
7	70	77	84	91	98	105	112	119	126	133	140
8	80	88	96	104	112	120	128	136	144	152	160
9	90	99	108	117	126	135	144	153	162	171	180
10	100	110	120	130	140	150	160	170	180	190	200

11. Handwritten

12. (i) Divisor = 6, Dividend = 516, Quotient = 86, Remainder = 0 Verification = 6 × 86 = 516

(ii) Divisor = 3, Dividend = 948, Quotient = 316, Remainder = 0 Verification = 3 × 316 = 948

(iii) Divisor = 12, Dividend = 1012, Quotient = 84, Remainder = 4 Verification = 12 × 84 + 4 = 1012

(iv) Divisor = 24, Dividend = 6540, Quotient = 262, Remainder = 12 Verification = 24 × 262 + 12 = 6540

(v) Divisor = 50, Dividend = 65906, Quotient = 131, Remainder = 46 Verification = 50 × 131 + 46 = 65906

13. (i) One glass lemonade costs = ₹ 35

215 glass lemonade = 215 × 35 = ₹ 7525

(ii) Number of chocolates bar one carton can hold = 85

Number of cartons needed for 510 chocolates bars = 510 ÷ 85 = 8

(iii) Minutes in 1680 seconds = 1680 ÷ 60 = 28

(iv) Number of shells in 1 necklace = 32

Number of necklaces made using 192 shells = 192 ÷ 32 = 6

(v) (a) 10 (b) 20 (c) 50

(vi) Airfare charge for 1 ticket = ₹ 12857

Airfare charge for 25 such tickets = 25 × 12857 = ₹ 321425

(vii) While dividing 18448 by 48 we get remainder 16, so 16 should be subtracted from 18448 to make it divisible by 48

14. (i) Cost of 2 pizzas = ₹ 198

Cost of 1 pizza = ₹ 99

Cost of 15 pizzas = 15 × 99 = ₹ 1485

(ii) Selling price of 20 candles = ₹ 100

Selling price of 1 candle = ₹ 100 ÷ 20 = ₹ 5

Selling price of 80 candles = 80 × 5 = ₹ 400

(iii) Cost of 3 sacks of sand = ₹ 540

Cost of 9 sacks of sand = 9 × 540 = ₹ 4860

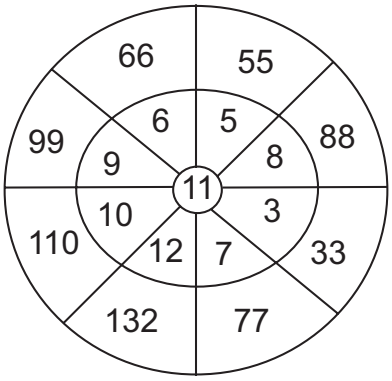
(iv) Suresh sells 15 rasogullas at the rate of ₹ 120.

Rate of 1 rasogulla = 120 × 15 = ₹ 8

Number of rasogullas for ₹ 800 = 800 ÷ 8 = 100

15. (i) (c) (ii) (a) (iii) (c)

16.



Chapter 12 HOW HEAVY? HOW LIGHT?

1. (a) 6 kg (b) 10 kg (c) 18 kg (d) 12 kg

2. (i) (b) (ii) (d) (iii) (b) (iv) (c) (v) (b) (vi) (a) (vii) (b) (viii) (b)

3. (i) kg (ii) kg (iii) g (iv) g (v) g

4. (i) 100 kg 270 g (ii) 123 kg 875 g (iii) 134 kg 630 g (iv) 20 kg 150 g
(v) 4 kg 350 g (vi) 314 kg 250 g (vii) 65 kg 390 g

5. (i) 74 kg 940 g (ii) Cupboard

6. (i) (a) ↑ (b) ↓
(ii) (a) ↑ (b) ↓
(iii) (a) ↓ (b) ↑
(iv) (a) ↑ (b) ↓
(v) (a) ↓ (b) ↑

7. (i) 1600 g (ii) 20 g 50 g

8. (i) False (ii) False (iii) False (iv) False (v) False

9. (i) ↔ (c) (ii) ↔ (d) (iii) ↔ (e) (iv) ↔ (f)
(v) ↔ (b) (vi) ↔ (a)

10. (i) (a) Cost of 1 kg apples = 180 ÷ 2 = ₹ 90
(b) Cost of 1 kg packet of salt = 2 × 35 = ₹ 70
(c) Cost of 1 kg rajma = 280 ÷ 4 = ₹ 70
(ii) (a) Cost of ½ kg of pears = 30 ÷ 2 = ₹ 15
(b) Cost of 5 kg pears =5 × 30 = ₹ 150
(c) Cost of 250 g pears = 30 ÷ 4 = ₹ 7.50

11. (a) Total weight = 5 kg + 3 kg = 8 kg
(b) Total weight = 5 kg 500 g + 5 kg 500 g = 11 kg
(c) Arun weights 39 kg. His brother weights 14 kg. What is the difference in weights 39 kg – 14 kg = 25 kg
(d) Total weight = 400 g + 300 g + 750 g + 600 g + 700 g = 2750 g = 2 kg 750 g
(e) Cake left with Maria = 750 g – 125 g = 625 g

Chapter 13 FIELDS AND FENCES

1. (i) 23.5 cm (ii) 27 cm (iii) 48 cm

2. (ii)

3. (i) 20 (ii) 22 (iii) 16 (iv) 24 (v) 30 (vi) 26

4. (i) 4 (ii) 7 (iii) 9 (iv) 11

5. Do yourself.

6. (i) Length of the boundary of triangle = 18 cm + 19 cm + 20 cm = 57 cm
(ii) Perimeter of table = 2 (3 m 40 cm + 80 cm) = 8 m 40 cm
Lace left = 20 m – 8 m 40 cm = 11 m 60 cm
(iii) Side of square = 140 m
Perimeter of square = 4 × 140 = 560 m
Wire required to fence the square 3 times = 3 × 560 = 1680 m
(iv) Perimeter of rectangular park = 2 (120 m + 40 m) = 320 m
Distance covered in 2 rounds = 2 × 320 = 640 m

7. (i) 14 cm (ii) 26 cm (iii) 18 cm

8. (i) (a) 49 (b) 7 × 7 = 49
(ii) 10

9. Because perimeter of outer circle is more than inner circle.

10. 16 cm

11. (i) 7000 (ii) 250 (iii) 500 (iv) 5 (v) 100

12. (i) (a) (ii) (d) (iii) (c) (iv) (a) (v) (c)

Chapter 14 SMART CHARTS

1. (i) (c) (ii) (c) (iii) (d) (iv) (a)

2. (i) 4 (ii) Real juice (iii) X & S

3. (i) 16 km/ lit. (ii) (a) 2 litres (b) 3 litres (iii) 20 km/ lit.

4. (i) Week 4 (ii) 16 litres (iii) 52 litres

5. (i) Thursday (ii) 2 hours (iii) 10 hours

6. (a) Outside (ii) 10 hours (iii) 9 hours