

Explore Math-CLASS-5

Chapter 1 : Exercise 1

A. 1. Twenty crore fifty-three lakh seventy-one thousand one hundred fifty-nine
2. Two crore seventy-three lakh forty-seven thousand one
3. Fifty two crore sixty-eight lakh eighty-five thousand fifteen
4. Twenty-eight crore sixteen lakh eleven thousand one hundred thirteen
5. Forty-two crore one hundred fifty-three

B. 1. 7,83,45,287 2. 9,60,8163. 43,00,54,001 4. 10,16,04,7855. 1,00,00,001

Exercise 2

A. 1. Five hundred sixty-one million six hundred seventy-five thousand eight hundred ninety-one
2. Seven hundred thirty-eight million one hundred ninety thousand three hundred twenty-five
3. Four hundred million three hundred seventy-nine thousand one hundred fifty-six
4. Forty-six million two hundred fifty-six thousand three hundred ninety-two
5. Nine million one hundred seventy-two thousand four hundred fifteen

B. 1. 90,550,070 2. 46,223,7113. 900,000,500 4. 783,5765. 23,053,557

C. 1. 152,345,360 2. 54,398,7603. 254,007,109 4. 432,479,4945. 999,999,999

D. 2. Fifty crore twenty-three lakh seventy-one thousand one hundred forty
3. Thirty-six crore fifteen thousand two hundred fifteen
4. Five hundred seventy-eight million nine hundred thousand five hundred forty-one
5. One hundred ninety-eight million two hundred thousand four hundred ninety-eight

Exercise 3

A. 1. $>$ 2. $<$ 3. $>$ 4. $=$ 5. $<$

B. 1. ascending-23,54,34,971; 43,19,24,197; 63,27,19,149; 71,42,37,149; descending-71,42,37,149; 63,27,19,149; 43,19,24,197; 23,54,34,971
2. ascending-16,54,24,500; 16,55,24,439; 17,34,28,819; 17,54,37,200; descending-17,54,37,200; 17,34,28,819; 16,55,24,439; 16,54,24,500
3. ascending-1,15,34,250; 3,45,27,198; 42,25,45,400; 43,25,54,000; 3) descending-43,25,54,000; 42,25,45,400; 3,45,27,198; 1,15,34,250

C. Successor-Predecessor
1. Successor 2,15,00,511; Predecessor 2,15,00,509
2. Successor 15,15,25,401; Predecessor 15,15,25,399
3. Successor 8,00,00,000; Predecessor 7,99,99,998
4. Successor 11,00,00,001; Predecessor 10,99,99,999
5. Successor 1,23,59,100;

Predecessor 1,23,59,098

Exercise 4

A. 1. 468450403 2. 51643508 3. 766424034. 37404692 5. 921653347

B. 1. 130809510 2. 221282027 3. 3152090114. 20099643 5. 11003214

C. 1. 459661032 2. 590288523. 199432788 4. 100001111

Exercise 5

A. 1. 124016235 2. 9223006 3. 446990974. 8152436 5. 3595725 6. 87192000

Exercise 6

A. 1. $Q=96$ $R=27$ 2. $Q=91$ $R=1693$. $Q=1299$ $R=132$ 4. $Q=1562$ $R=1005$. $Q=346$ $R=439$

B. 1. $Q=5$ $R=146$ 2. $Q=3$ $R=23243$. $Q=29$ $R=524$ 4. $Q=40$ $R=1345$. $Q=10$ $R=2973$ 6. $Q=9$ $R=33645$

C. 1. 6,52,58,000 2. 36,90,0853. 41,04,000 4. ` 6,97,3405. 9388 Families 6. 577. ` 1330425 8. 90 Trucks 9. ` 76,38,480 10. 14,92,966

Chapter 2 : Exercise 1

A. 1. 24 2. 19 3. 11 4. 21 5. 46. 53 7. 0 8. 19 9. 27 10. 18

Exercise 2

A. 1. $14 - 10$ 2. $36 \div 6$ 3. $7 + 9$ 4. 7×5 5. $15 - 7$

B. 1. $15 + (7 - 5)$ 2. $120 - 6 \times 73$. $90 \div 15 + 5 \times 7$ 4. $(18 - 4) + 9 \times 35$. $75 - 6 \times 4$

Exercise 3

A. To be done by students

B. To be done by students

C. 1. 28 2. 14, 14 3. 23

Chapter 3 : Exercise 1

A. 1. XL 2. LXXV 3. XC 4. C5. XXVII

B. 1. 36 2. 75 3. 1120 4. 45 5. 2500

C. 1. 13 - XIII 2. 750 - DCCL3. 215 - CCXV 4. 1927 - MCMXXVII5. 2760 - MMDCCCLXD. 1. 980 = CMLXXX 2. 1543 = MDXLIII3. 1865 = MDCCCLXV 4. 2157 = MMCLVII

5. 1010 = MX

E. 1. CXX 2. CDV3. MMMCDLXXV 4. LX5. MCDXV

Chapter 4 : Exercise 1

A. 1. 7, 14, 21, 28, 35 2. 12, 24, 36, 48, 603. 15, 30, 45, 60, 75

B. 1. 24, 48, 72 2. 24, 48, 723. 6, 12, 18

C. 1. 16, 32, 48 2. 36, 72, 108

Exercise 2

A. 1. 3,14,234 ; 71,2502. 51, 294 ; 314283. 1,83,456 ; 78,9204. 3,27,400 ; 1,29,505 ; 43,20,1955. 94,2846.

7,87,608 ; 51,16,0247. 4,51,836

B. 2. 29,44,821 4. 1,23,244

C. 3. 6, 50, 916 5. 9,12,600

D. 1. 9,37,950 2. 1,32,450 3. 47,92,005

E. 1. 21840, 49761, 1345712. 73040, 321970,
4010503. 24620, 9192, 464204. 2341404, 5670216,
90087605. 234696, 431299, 734030

Exercise 3

A. 1. $2 \times 2 \times 2 \times 3 \times 32$. $2 \times 2 \times 2 \times 3 \times 3 \times 33$. $2 \times 2 \times 3 \times 3 \times 3 \times 34$. $2 \times 2 \times 2 \times 675$. $5 \times 5 \times 41$

B. 1. 75 2. 25 3. 12 4. 15 5. 2

Exercise 4

A. 1. 14 2. 14 3. 10 4. 32 5. 2 6. 15

Exercise 5

A. 1. 432 2. 252 3. 80 4. 16632 5. 252

B. 1. 72 2. 480 3. 330 4. 1352 5. 1506. 360

Exercise 6

A. 16 B. 90

C. 84 D. 210

E. 63 F. 600

G. Option 3

H. 1. 90 students 2. 6 cm³. 7.01 p.m. 4. 72 girls 5. 20 litres 6. 420

Chapter 5 : Exercise 1

B. 1. $3\frac{3}{4}$ 2. $1\frac{5}{7}$ 3. $6\frac{11}{14}$ 4. $5\frac{2}{3}$

5. $6\frac{1}{4}$

C. 1. $\frac{15}{7}$ 2. $\frac{64}{11}$ 3. $\frac{31}{9}$ 4. $\frac{12}{5}$ 5. $\frac{19}{10}$

D. 1. $\frac{4}{5}$ 2. $\frac{1}{3}$ 3. $\frac{1}{15}$ 4. $2\frac{1}{2}$

E. 1. $1\frac{1}{9}$ 2. $1\frac{27}{77}$ 3. 4 4. $9\frac{19}{28}$ 5. $1\frac{1}{8}$

F. 1. $\frac{11}{25}$ 2. $\frac{1}{2}$ 3. $\frac{5}{9}$ 4. $2\frac{17}{24}$ 5. $\frac{1}{15}$

G. 1. $\frac{1}{13}, \frac{9}{13}, \frac{11}{13}, \frac{12}{13}$ 2. $\frac{24}{36}, \frac{24}{30}, \frac{24}{29}, \frac{24}{25}$

Exercise 2

A. 1. $9\frac{3}{4}$ 2. $11\frac{2}{3}$ 3. $12\frac{1}{2}$

4. 8 5. $17\frac{1}{2}$

B. 1. $\frac{10}{21}$ 2. $\frac{4}{81}$ 3. $\frac{10}{77}$ 4. $\frac{2}{5}$ 5. $\frac{7}{12}$

6. $16\frac{21}{32}$ 7. $10\frac{31}{32}$ 8. $62\frac{1}{2}$ 9. $46\frac{7}{8}$

10. $9\frac{1}{3}$

Exercise 3

A. 1. 1 2. 0 3. $\frac{7}{9}$ 4. $\frac{4}{9}$ 5. 0

6. $\frac{1}{5} \times \frac{2}{3}$ 7. $\frac{3}{5}$ 8. $\frac{2}{3}, \frac{7}{8}$ 9. 1

10. $\frac{2}{5}, 4$

B. 1. 12 branches

2. 9 chocolates

3. a. 45 roses, b. 15 red roses

4. 16 cups

5. 3,75,000

6. 5 students

Exercise 4

A. 1. $\frac{4}{35}$ 2. $\frac{1}{21}$ 3. $\frac{7}{12}$ 4. $\frac{3}{5}$ 5. $\frac{5}{7}$

B. 1. 6 2. 80 3. 6 4. 45 5. 285

C. 1. $1\frac{7}{11}$ 2. $1\frac{13}{18}$ 3. $\frac{35}{64}$ 4. $2\frac{2}{3}$

5. $3\frac{12}{13}$ 6. 3 7. $2\frac{8}{11}$ 8. 2

D. 1. $\frac{7}{9}$ 2. 0 3. 1 4. $\frac{4}{5}$ 5. 1

E. 1. 9 hrs 2. 75 dinosaurs 3. 140 cm

Chapter 6 : Exercise 1

- A. 1. $\frac{7}{10}$ 2. $\frac{479}{100}$ 3. $\frac{12431}{1000}$ 4. $\frac{9001}{1000}$ 5. $\frac{1512}{100}$
B. 1. 1.3 2. 0023 3. 12.03 4. 249.007
5. 0.496

Exercise 2

- A. 1. $(2 \times 1) + (5 \times \frac{1}{10}) + (3 \times \frac{1}{100})$
2. $(2 \times 10) + (1 \times 1) + (7 \times \frac{1}{10})$
3. $(4 \times \frac{1}{10}) + (9 \times \frac{1}{100}) + (5 \times \frac{1}{1000})$
4. $(1 \times 10) + (2 \times 1) + (1 \times \frac{1}{10})$

- B. 1. $1 + 0.7 + .03$
2. $0.3 + 0.03 + 0.004$
3. $200 + 10 + 1 + 0.4 + 0.02$
4. $1 + 0.1 + 0.05 + 0.009$

- C. 1. > 2. < 3. > 4. > 5. =

- D. 1. 1.97, 2.43, 2.73, 3.15
2. 0.1242, 1.242, 12.42, 124.2
3. 2.0001, 2.001, 2.010, 2.100
4. 327.1, 327.4, 336.43, 343.413

Exercise 3

- A. 1. 52.47 2. 30.888 3. 4.652 4. 388.975. 1142.473
B. 1. 33.52 2. 11.479 3. 963.53 4. 2.9095. 3.334
C. 1. 1.58 2. 19.15 3. 26.217 4. 132.8555. 4.05
D. 1. 1.78 2. 12.2 3. 4.84 4. 200.46
5. 7.362

Exercise 4

- A. 1. 25.2 2. 134.9 3. 0.7 4. 7195. 19434.3 6. 103.5 7. 4980 8. 2718.49. 24934

Exercise 5

- A. 1. 0.28 2. 0.004 3. 0.18 4. 0.00255. 0.07
B. 1. 43.50 2. 24.82 3. 1689.74 4. 1366.825. 730.10
C. 1. 2.14 2. 7.13 3. 0.4 2.91 5. 24.25

Exercise 6

- A. 1. 1.55 2. 5.8 3. 0.195 4. 0.1435. 0.0026
B. 1. 1.49 2. 4.03 3. 1.66 4. 0.075. 0.111

Exercise 7

- A. 1. 0.3153 2. 0.1793 3. 0.415374. 19.734 5. 0.00273
6. 3.2153

Exercise 8

- A. 1. 7.5 2. 0.0002 3. 22.31 4. 424.95. 2.6 6. 2.43

Exercise 9

- A. 1. 0.75 2. 0.555 3. 2.125 4. 7.4285. 1.4 6. 5.2 7. 2.5
8. 5.25
B. 1. ` 2335.50 2. 1.41m 3. 9.8kg 4. 7.5 kg5. 0.85 kg 6.
` 700

Chapter 7 : Exercise 1

- A. 1. 760 2. 263000 3. 735900 4. 496305. 740000 6.
850000 7. 139940 8. 261009. 144700 10. 527000
B. 1. 763.5 2. 19 3. 268.94 4. 995. 4.23 6. 17 7. 5.49 8.
7831.29. 464 10. 0.438
C. 1.13,00,000
D. 34.8

Chapter 8 : Exercise 1

- A. 1. 56 2. 90.6
B. 210km
C. ` 2100
D. 141 cm
E. 15
F. ` 380
G. 74kg
H. 2247
I. 123

Chapter 9 : Exercise 1

- A. 1. 36% 2. 45% 3. 73% 4. 18%5. 100%
B. To be done by students.

Exercise 2

- A. 70%
B. 60%
C. 60%
D. 1. 60% 2. 36% 3. 37.5% 4. 35%5. 287.5% 6. 350% 7.
733.3% 8. 525%
E. 1. 925 2. 710 3. 325 4. 11105. 7220 6. 16 7. 11500
8. 31400

Exercise 3

- A. 1. 35% 2. 43.2% 3. 0.8% 4. 1273% 5. 279%
B. 1. 0.1 2. 0.135 3. 0.45 4. 0.076 5. 0.3025

Exercise 4

- A. 1. 16 2. 9 3. 91.35 4. 3.052 5. 75
B. 1. 2.4 metres 2. 0.225 kg3. 853.44 km 4. ` 68.445.
315 kg

Exercise 5

- A. 1. 25% 2. 77.77% 3. 20% 4. 28%5. 65%
B. 1. 77.7% 2. 80.5% 3. 71.8% 4. 12%5a. 75% 5b. 25%
6. 450

Chapter 10 : Exercise 1

- A. 1. profit ` 12 2. profit ` 30 3. loss ` 24. profit ` 70 5.
loss ` 3 6. profit ` 30

Exercise 2

A. 1. SP = ` 3650 2. SP = ` 111 3. SP = ` 7144. CP = 450
5. CP = ` 1800 6. Profit = ` 57

Exercise 3

A. 2. Loss = 300, loss% = 4.9% 3. profit = ` 5, profit% = 20%
4. Loss = 150, loss% = 6.9% 5. loss = 220, loss% = 5.9%

B. 1. profit = 70, profit% = 10% 2. 15% 3. 20% profit 4. a.
profit, b. ` 170 c. profit% = 212.5%

Exercise 4

A. 1. ` 918.75 2. ` 637.5 3. ` 5404. ` 594 5. ` 1380

B. 1. ` 7,200 2. ` 13,97,760 3. ` 9000 4. ` 8800

Chapter 11 : Exercise 1

A. 1. I = 300, A = 3300 2. I = 800, A = 5800 3. I = 128, A = 3328
4. I = 900, A = 6900 5. I = 1152, A = 5952

B. ` 400

C. ` 4640

D. ` 1260

E. ` 2242.50

F. ` 150

G. ` 3296

H. ` 69,600

Chapter 12 : Exercise 1

A. 1. 100 km/hr 2. 1 m/sec 3. 5 km/hr

B. 1. 140 km 2. 90 km/hr 3. 24.7 hrs

C. 430 km/hr

D. 56 km/hr

E. 48 words per minute

Exercise 2

A. 1. 19.4 m/s 2. 30 m/s 3. 7.5 m/s

4. 40 m/s 5. 33.3 m/s

B. 1. 126 km/hr 2. 288 km/hr 3. 450 km/hr 4. 144
km/hr 5. 28.8 km/hr

C. 1. 43.8 m/s, 157.6 km/hr

D. 6 hrs

E. 4.8 km/hr

Chapter 13 : Exercise 1

A. 1. c 2. b 3. a 4. d 5. a

B. To be done by students.

Exercise 2

A. $\angle AOB$, $\angle AOD$, $\angle BOD$, $\angle AOC$, $\angle AOE$, $\angle COE$, $\angle COB$,
 $\angle EOB$ and $\angle BOA$

B. To be done by students.

C. 1. $\angle 5$, $\angle 6$, $\angle JVH$ 2. $\angle 2$, $\angle 3$, $\angle DVF$ 3. $\angle 1$, $\angle 2$, $\angle RVT$ 4.

$\angle 3$, $\angle 4$, $\angle DVF$ 5. $\angle 3$, $\angle 4$, $\angle KVM$ 6. $\angle 1$, $\angle 2$, $\angle 3$, $\angle IVF$

D. To be done by students.

Exercise 3

A. 1. obtuse angle 2. acute angle 3. right angle 4. acute
angle 5. reflex angle 6. straight angle 7. reflex angle 8.
obtuse angle

B. To be done by students.

C. 1. $\angle GHK=73^\circ$ 2. $\angle HJL=113^\circ$ 3. $\angle UST=30^\circ$ 4. $\angle GH=$
 150° 5. $\angle MKL= 61^\circ$ 6. $\angle EFH = 52^\circ$

Exercise 4

A. 1. Acute triangles – 1 and 4 Right triangles – 2 and
5 Obtuse triangles – 3 and 6

B. 1. isosceles 2. scalene 3. equilateral 4. isosceles 5.
scalene

C. 1. equal 2. different 3. one 4. greater 5. base

Exercise 5

A. 1. true 2. true 3. false

4. false 5. true

B. 1. parallelogram 2. square 3. rhombus 4.

trapezium 5. rectangle 6. rhombus

Exercise 6

A. To be done by students.

B. To be done by students.

Exercise 7

A. 1. 110° 2. 107° 3. 68° 4. 70°

5. 112° 6. 161° 7. 75°

B. 1. 14 2. 7 3. 44 4. 20

C. 1. 360° 2. 720° 3. 1080° 4. 1440° 5. 180°

Exercise 8

A. A, B, E and G

B. 16 congruent triangles

Exercise 9

To be done by students.

Chapter 14 : Exercise 1

A. 1. 24 cm 2. 15 cm 3. 27 cm 4. 24 cm 5. 12 cm 6.

36dm 7. 140dm 8. 135dm 9. 160dm 10. 186dm

B. 1. 18 cm 2. 54 cm 3. 150 cm 4. 25 cm

C. 1. 35.6 cm 2. 46 cm 3. 20 cm 4. 80 cm

Exercise 2

A. 1. 15 mm² 2. 60 inches 3. 24 m² 4. 500 km²

B. 1. 64 cm² 2. 16 cm² 3. 30.25 m²

C. To be done by students.

D. 1. 351 cm² 2. 64 cm² 3. 59 cm²

DI. 4. 62 cm² 5. 220 mm² 6. 44 m²

Exercise 3

To be done by students.

Exercise 5

A. 1. 1728 cm³ 2. 64 cm³ 3. 1000 cm³ 4. 421.875 m³

B. 1. 200 cm³ 2. 60 cm³

Exercise 6

A. 1. side \times side \times side

2. length \times breadth \times height 3. 70 ml 4. 215. 450 cm³

Chapter 15 : Exercise 1

A. 1. ` 25 2. ` 2703. ` 18 4. ` 1045. ` 270 6. 25 I 7. 26 8.
630

Exercise 2

A. 1. 13 2. 163. 363 km 4. 16 hrs. 5. ` 2700 6. ` 19,065

Exercise 3

A. 1. 16 days 2. 36 min 3. 2 hrs. 4. 12 men

Chapter 16 : Exercise 1

A. 1. 50°F 2. 65°F 3. 27°F 4. 90°F

B. 1. 29.44°C 2. 34.4°C 3. 27.7°C 4. 45°C 5. 60°C

C. 1. 122°F 2. 113°F 3. 158°F 4. 179.6°F 5. 98.6°F

D. 1. Tuesday 2. Average temperature = 86.4°F

E. 5°C

F. 1. 100°C 2. 212°F 3. 0°C 4. 32°F 5. Thermometer

Chapter 17 : Exercise 1

To be done by students.