CPA Mathematics

Answer Keys/Solutions

ALBAKIO INTERNATIONAL
LAHORE - KARACHI

Grade: Three

CPA MATHS GRADE 3 ANSWER KEY

UNIT #1

Exercise 1.1

Question 1:

Write the place value of the colored digit in the following numbers:

- a. **2**6 **Tens**
- b. 4**3 Ones**
- c. **1**87 **Tens**
- d. 4**0**6 **Tens**
- e. 83**9 Ones**
- f. 1**2**79 **Hundreds**
- g. **3**758 **Thousands**
- h. 34**7**1 **Tens**
- i. 50**9**3 **Tens**

Exercise 1.2

Q1:

b. 608

- **Th:** 0 (Thousands)
- **H:** 6 (Hundreds)
- **T:** 0 (Tens)
- **O:** 8 (Ones)

Number Name: Six hundred eight

c. 4356

- **Th:** 4 (Thousands)
- **H:** 3 (Hundreds)

- **T:** 5 (Tens)
- **O:** 6 (Ones)

Number Name: Four thousand, three hundred fifty-six

d. 8909

- **Th:** 8 (Thousands)
- **H:** 9 (Hundreds)
- **T:** 0 (Tens)
- **O:** 9 (Ones)

Number Name: Eight thousand, nine hundred nine

Question 2: Write the number names of each of the following in your notebook.

a. 575: Five hundred seventy-five b. 6534: Six thousand five hundred thirty-four c. 9859: Nine thousand eight hundred fifty-nine d. 7452: Seven thousand four hundred fifty-two

Question 3: Write the numbers:

a. Four thousand, three hundred and sixty-five: 4365 b. Six thousand, one hundred and twenty-nine: 6129 c. Two thousand, three hundred and sixty-three: 2363 d. Nine thousand and sixty-nine: 9069 e. Eight thousand three hundred: 8300

Exercise No. 1.3

Question 1: Encircle the greatest number in each of the following:

a. 986, 308, 834

- **986**

b. 9898, 431, 2879

- **9898**

c. 5083, 5992, 5931

- **5992**

Question 2: Encircle the smallest number in each of the following:

a. 456, 806, 305

- **305**

b. 4312, 643, 2891

- **643**

c. 823, 833, 801, 810

- **801**

Question 3: Write whether the following numbers are arranged in descending or ascending order:

a. 156, 166, 660, 773, 837, 999

- **Ascending Order**

b. 936, 810, 638, 531, 465, 238

- **Descending Order**

c. 4498, 5439, 6937, 1234, 5789

- **Neither Ascending nor Descending Order** (The numbers are not in a consistent order.)

Exercise No. 1.4

1. Round off the given numbers to the nearest 10.

- a. 64 ≈ 60
- b. 125 ≈ 130
- c. 335 ≈ 340
- d. 235 ≈ 240

2. Round off the given numbers to the nearest 100.

- a. 236 ≈ 200
- b. 153 ≈ 200
- c. 716 ≈ 700
- d. 660 ≈ 700

3. Round off to the nearest 1000.

- a. 4561 ≈ 5000
- b. 1383 ≈ 1000

- c. 3582 ≈ 4000
- d. 5708 ≈ 6000

Exercise No. 1.5

Question 1: Write the numerals in Roman numbers.

a. 7 = VII b. 15 = XV c. 19 = XIX d. 16 = XVI e. 9 = IX f. 6 = VI g. 1 = I h. 10 = X

Question 2: Write the Roman numbers as numerals.

a. XII = 12 b. III = 3 c. XIII = 13 d. IV = 4 e. XIX = 19 f. XVII = 17 g. XV = 15 h. XX = 20

Exercise No. 1.6

1. Circle the even numbers.

1. 15 5 11 17
2. **12** 15 **2 18**
3. **2 20 8** 3
4. **6** 5 **8 16**

2. Circle the odd numbers.

1. **9 19 17 3**
2. **3** 20 14 4
3. 10 **15 7 16**
4. **1** 20 **2 6**

3. Color the even numbers.

9	39	48	99
20	73	52	63
32	45	89	11

Even numbers are: 20, 48, 52, 32

CH #2

Exercise No. 2.1

Problem a):

T H T O

4 3 1 8

\+ 0 0 2

---

4 3 3 0

Problem b):

T H T O

7 9 9 9

\+ 0 0 0

---

7 9 9 9

Problem c):

T H T O

3 2 8 3

\+ 0 4 3

---

3 3 2 6

Problem d):

T H T O

4 6 4 3

\+ 2 8

---

4 6 7 1

Problem e):

T H T O

3 8 4 6

\+ 3 2 2

---

4 1 6 8

Problem f):

T H T O

9 6 3 8

\+ 2 9 9

---

9 9 3 7

Exercise No. 2.2

Problem 1:

T H T O

3 2 1 4

\+ 1 5 3 3

---

4 7 4 7

Problem 2:

T H T O

6 4 5 2

\+ 3 3 3 5

---

9 7 8 7

Problem 3:

T H T O

6 2 1 8

+ 1 0 1 0

---

7 2 2 8

Exercise No. 2.3

Problem 1:

T H T O

4 9 8 9

+ 3 2 9 9

---

8 2 8 8

Problem 2:

T H T O

1 5 3 9

+ 6 3 4 9

---

7 8 8 8

Problem 3:

T H T O

7 8 6 2

+ 6 2 8 7

---

1 4 1 4 9

Exercise 2.4

Q1 Practice mental math and add the following numbers:

Here are the mental math questions and their answers:

i. 14 + 13 = 27

ii. 48 + 11 = 59

iii. 35 + 30 = 65

iv. 28 + 10 = 38

v. 33 + 16 = 49

vi. 32 + 36 = 68

vii. 56 + 11 = 67

viii. 72 + 4 = 76

Exercise No. 2.5

Question 1:

5137 men and 3248 women work in two factories. How many workers are there altogether in these factories?

Answer 1:

To find the total number of workers, we need to add the number of men and women:

5137 men + 3248 women = 8385 workers

Therefore, there are a total of 8385 workers in the two factories.

Question 2:

In a library, there are 4130 books of the Science group and 1133 books of the Arts group. Find the total number of books in the library.

Answer 2:

To find the total number of books, we need to add the number of Science group books and Arts group books:

4130 Science group books + 1133 Arts group books = 5263 books

Therefore, there are a total of 5263 books in the library.

Question 3:

A factory produces 2450 bicycles and 4500 tricycles in a day. Find the total production of the factory in the day.

Answer 3:

To find the total production, we need to add the number of bicycles and tricycles:

2450 bicycles + 4500 tricycles = 6950 vehicles

Therefore, the factory produces a total of 6950 vehicles in a day.

Exercise 2.6

Problem 1:

T H T O

6 8 6 3

- 3 0 2 0

---

3 8 4 3

Problem 2:

T H T O

8 8 3 9

- 4 2 0 0

---

4 6 3 9

Problem 3:

T H T O

5 9 6 3

- 2 1 3 1

---

3 8 3 2

Problem 4:

T H T O

8 6 8 7

- 7 4 5 3

---

1 2 3 4

Problem 5:

T H T O

7 2 9 3

- 4 3 2 0

---

2 9 7 3

Problem 6:

T H T O

8 9 2 3

- 2 3 0 0

---

6 6 2 3

Exercise No. 2.6.1

Problem 1:

T H T O

9 5 3 3

- 4 0 2 5

---

5 5 0 8

Problem 2:

T H T O

8 8 9 0

- 7 9 2 8

---

9 6 6 2

Problem 3:

T H T O

4 3 3 2

- 3 8 1 8

---

5 1 4

Problem 4:

T H T O

4 3 8 8

- 4 1 9 9

---

1 1 8 9

Problem 5:

T H T O

5 8 7 4

- 1 3 2 4

---

4 5 5 0

Problem 6:

T H T O

7 8 1 0

- 6 9 9 9

---

8 1 1

1) **40 - 10 = 30**
2) **57 - 20 = 37**
3) **54 - 34 = 20**
4) **95 - 80 = 15**
5) **86 - 23 = 63**
6) **77 - 75 = 2**

Exercise No. 2.8

Question 1:

The sum of two numbers is 7320. If one number is 5745, find the other number.

Answer 1:

To find the other number, we subtract the given number from the sum:

7320 - 5745 = 1575

Therefore, the other number is 1575.

Question 2:

A school has 3933 students. If the number of boys is 1637, then find the number of girls.

Answer 2:

To find the number of girls, we subtract the number of boys from the total number of students:

3933 students - 1637 boys = 2296 girls

Therefore, there are 2296 girls in the school.

Question 3:

There are 3874 kg of rice in a shop. 3492 kg of rice are sold in a week. How much rice is left in the shop?

Answer 3:

To find the remaining rice, we subtract the amount of rice sold from the initial amount:

3874 kg - 3492 kg = 382 kg

Therefore, there are 382 kg of rice left in the shop.

Question 4:

A factory produced 9971 motor-cycles. If 4293 motor-cycles were supplied to the distributors, then find the remaining number of motor-cycles.

Answer 4:

To find the remaining motor-cycles, we subtract the number of motor-cycles supplied from the total production:

9971 motor-cycles - 4293 motor-cycles = 5678 motor-cycles

Therefore, there are 5678 remaining motor-cycles.

Exercise No. 2.9

Part a:

i) 28 + 13 = 41

ii) 46 + 9 = 55

iii) 4300 + 2900 = 7200

Part b:

i) 9 - 8 = 1

ii) 99 - 12 = 87

iii) 333 - 101 = 232

Exercise No. 2.11

Problem 1:

```
 T O
 1 3
x  6
--------
 7 8
```

Problem 2:

```
 T O
 3 5
```

x 7

---

2 4 5

Problem 3:

T O

4 8

x 6

---

2 8 8

Problem 4:

T O

4 3

x 9

---

3 8 7

Problem 5:

T O

4 4

x 8

---

3 5 2

Exercise No. 2.12

Problem 1:

T O O

4 1 3

x 9

----

3 7 1 7

Problem 2:

H T O

3 3 3

x 4

----

1 3 3 2

Problem 3:

H T O

1 0 2

x 5

----

5 1 0

Problem 4:

T O O

3 2 1

x 8

----

2 5 6 8

Problem 5:

H T O

4 2 3

x 6

----

2 5 3 8

Problem 6:

H T O

4 4 4

x 9

---

4 0 0 6

Exercise No. 2.13

1. **7 x 5 = 35**
2. **5 x 8 = 40**
3. **2 x 6 = 12**
4. **10 x 5 = 50**
5. **4 x 9 = 36**
6. **6 x 8 = 48**

Exercise No. 2.14

Question 1:

Noor has 2 bags. Each bag has 214 oranges. How many oranges are there in 2 bags altogether?

Answer 1:

To find the total number of oranges, we multiply the number of oranges in each bag by the number of bags:

214 oranges/bag * 2 bags = 428 oranges

Therefore, there are 428 oranges in 2 bags altogether.

Question 2:

Rida drinks 3 glasses of milk every day. How many glasses of milk does she drink in 10 days?

Answer 2:

To find the total number of glasses of milk, we multiply the number of glasses per day by the number of days:

3 glasses/day * 10 days = 30 glasses

Therefore, Rida drinks 30 glasses of milk in 10 days.

Question 3:

The price of a pencil is Rs. 9. Nabeel buys 300 such pencils. What is the total cost that he has paid?

Answer 3:

To find the total cost, we multiply the price of each pencil by the number of pencils:

Rs. 9/pencil * 300 pencils = Rs. 2700

Therefore, Nabeel has paid a total of Rs. 2700 for the pencils.

Question 4:

Zara has 6 books. Each book has 260 pages. Find the total number of pages in 6 such books.

Answer 4:

To find the total number of pages, we multiply the number of pages per book by the number of books:

260 pages/book * 6 books = 1560 pages

Therefore, there are 1560 pages in 6 books.

Question 5:

There are 7 days in a week. How many days are there in 42 weeks?

Answer 5:

To find the total number of days, we multiply the number of days per week by the number of weeks:

7 days/week * 42 weeks = 294 days

Therefore, there are 294 days in 42 weeks.

Exercise #2.15

a)

- **2 rows of 3: 2 x 3 = 6**
- **3 rows of 2: 3 x 2 = 6**

b)

- **3 rows of 4: 3 x 4 = 12**

- **4 rows of 3: 4 x 3 = 12**

Exercise #2.16

a)

There are 12 footballs arranged in groups of 2.

12 ÷ 2 = **6**

b)

There are 12 oranges arranged in groups of 3.

12 ÷ 3 = **4**

c)

There are 14 candies arranged in groups of 2.

14 ÷ 2 = **7**

d)

There are 30 bottles arranged in groups of 3.

30 ÷ 3 = **10**

Exercise #2.16.1

Problem 1:

23

3) 69

-6

--

09

-9

--

0

Problem 2:

14

2) 28

-2

--

08

-8

--

0

Problem 3:

10

5) 50

-5

--

00

-0

--

0

Problem 4:

11

6) 69

-6

--

09

-6

--

3

Problem 5:

212

3) 638

-6

--

03

-3

--

08

-6

--

2

Problem 6:

11

5) 57

-5

--

07

-5

--

2

Exercise No. 2.16.2

Problem 1:

133

1) 133

-1

--

3

-3

--

03

-3

--

0

Problem 2:

107

6) 642

-6

--

04

-0

--

42

-42

--

0

Problem 3:

111

5) 555

-5

--

05

-5

--

05

-5

--

0

Problem 4:

221

4) 884

-8

--

08

-8

--

04

-4

--

0

Exercise No. 2.16.3

1) **6 ÷ 2 = 3**
2) **9 ÷ 3 = 3**
3) **8 ÷ 4 = 2**
4) **6 ÷ 6 = 1**

Exercise No. 2.17

1. Tick (✓) the correct option.

i. 7 times 6 is equal to

- **(a) 42**

ii. The sum of 4590 and 1535 is

- **(b) 6025**

iii. What is the product of 4 and 3?

- **(c) 12**

iv. _____ is a repeated addition.

- **(c) Multiplication**

v. _____ is a successive subtraction.

- **(c) Division**

2. Nasira has to write 60 pages as a homework. She writes 6 pages in a day. In how many days will she complete this homework?

- To find the number of days, divide the total number of pages by the number of pages written per day: 60 pages / 6 pages/day = **10 days**

3. A farmer has 42 orange trees in his garden. If there are 7 trees in each row, then how many rows of orange trees does he have?

- To find the number of rows, divide the total number of trees by the number of trees per row: 42 trees / 7 trees/row = **6 rows**

4. The cost of 8 pencils is Rs. 80. What will be the cost of one pencil?

- To find the cost of one pencil, divide the total cost by the number of pencils: Rs. 80 / 8 pencils = **Rs. 10/pencil**

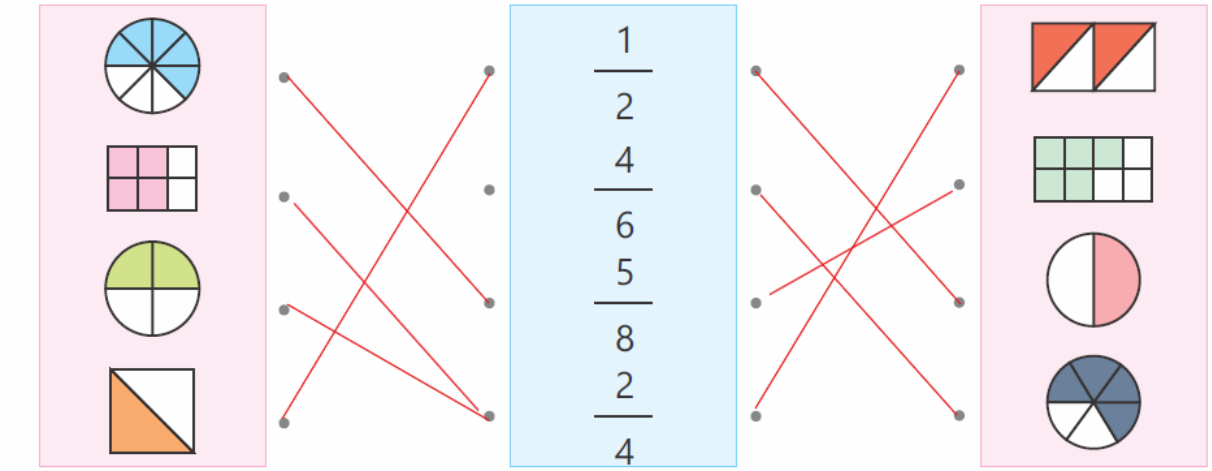
5. The price of 7 chocolates is Rs. 56. Find the price of one chocolate.

- To find the price of one chocolate, divide the total cost by the number of chocolates: Rs. 56 / 7 chocolates = **Rs. 8/chocolate**

CH #3

EX #3.1

Match the figures with the related fractions.



Exercise No. 3.2

i) 5/7

- **Proper fraction:** The numerator (5) is less than the denominator (7).

ii) 3 7/2

- **Mixed fraction:** It consists of a whole number (3) and a proper fraction (7/2).

iii) 6/4

- **Improper fraction:** The numerator (6) is greater than the denominator (4).

iv) 5 4/4

- **Mixed fraction:** It consists of a whole number (5) and a proper fraction (4/4). However, since 4/4 equals 1, this can also be represented as the whole number 6.

v) 1/4

- **Proper fraction:** The numerator (1) is less than the denominator (4).

vi) 6 9/6

- **Mixed fraction:** It consists of a whole number (6) and a proper fraction (9/6). However, since 9/6 equals 1 3/6, this can also be represented as the mixed number 7 3/6.

Exercise No. 3.3

a. 1/2

- 2/4
- 3/6
- 4/8

b. 4/5

- 8/10
- 12/15
- 16/20

c. 1/3

- 2/6
- 3/9
- 4/12

d. 1/8

- 2/16
- 3/24
- 4/32

Exercise No. 3.4

1. Circle the like fractions in each of the following sets:

- **a.** 1/4 and 3/4 are like fractions as they have the same denominator.
- **b.** 7/8 and 5/8 are like fractions as they have the same denominator.

2. Use symbols "<", ">", or "=" in the following fractions:

- **a.** 3/9 < 5/9
- **b.** 3/5 > 2/5
- **c.** 1/2 > 2/4

3. Write these fractions in descending and ascending orders.

- **a. Descending order:** 4/4, 3/4, 2/4, 1/4
- **a. Ascending order:** 1/4, 2/4, 3/4, 4/4
- **b. Descending order:** 5/8, 4/8, 3/8, 1/8, 2/8

- **b. Ascending order:** 1/8, 2/8, 3/8, 4/8, 5/8
- **c. Descending order:** 5/9, 4/9, 7/9, 2/9, 1/9
- **c. Ascending order:** 1/9, 2/9, 4/9, 5/9, 7/9

Exercise No. 3.5

1. Add the following fractions and write the resulting fraction in the given place.

a. 1/2 + 5/9 = 19/18

b. 1/4 + 1/4 = 1/2

2. Solve the following:

a. 4/6 + 3/6 = 7/6

b. 2/5 + 2/5 = 4/5

c. 5/8 + 4/8 = 9/8

d. 5/10 + 3/10 = 4/5

e. 2/8 + 3/8 = 5/8

Exercise No. 3.6

1. Solve these:

a. 5/9 - 1/3 = 5/9 - 3/9 = 2/9

b. 4/8 - 2/8 = 2/8 = 1/4

c. 6/4 - 3/4 = 3/4

d. 4/10 - 2/5 = 4/10 - 4/10 = 0

e. 5/8 - 2/2 = 5/8 - 8/8 = -3/8

2. Solve the following fractions, color the resulting figures and write the resulting fraction in the given place.

a. 2/3 - 1/3 = 1/3

b. 2/6 - 1/6 = 1/6

3. Solve the following:

a. 2/9 + 3/18 = 4/18 + 3/18 = 7/18

b. 2/10 - 5/20 = 4/20 - 5/20 = -1/20

c. 2/3 + 2/3 = 4/3

d. 7/16 - 2/8 = 7/16 - 4/16 = 3/16

e. 4/6 - 5/2 = 4/6 - 15/6 = -11/6

Exercise No. 3.7

1. Write the fractions in tenths.

i. 3/10 ii. 7/10

2. Write the fractions in hundredths.

i. 40/100 ii. 89/100

Unit #4

Exercise 4.1

1. Find the missing numbers.

- **a.** 98, 87, 76, 65, 54, **43**
    - The pattern is subtracting 11 from each number.
- **b.** 2, 4, 6, 8, 10, **12**
    - The pattern is adding 2 to each number.

2. What is the pattern rule in these number patterns.

- **a.** Subtract 6 from each number.
- **b.** Multiply each number by 2.
- **c.** Add 10 to each number.

3. Extend the number patterns.

- **a.** 3431, 3433, 3435, **3437, 3439, 3441**
    - The pattern is adding 2 to each number.
- **b.** 256, 250, 244, **238, 232, 226**

- The pattern is subtracting 6 from each number.

4. Write ascending and descending for these patterns.

- **a.**
  - Ascending: 3618, 5618, 7618, 9618
  - Descending: 9618, 7618, 5618, 3618
- **b.**
  - Ascending: 426, 428, 430, 432
  - Descending: 432, 430, 428, 426

5. Write the missing operation or number.

- **a.** 6 x 2 = 12
- **b.** 48 ÷ 6 = 8
- **c.** 24 x 2 = 48

Unit #5

Exercise No. 5.1

a) Classroom door: m (meters)

b) Whiteboard: m (meters)

c) Eraser: cm (centimeters)

d) Toothbrush: cm (centimeters)

e) Home to Railway station: km (kilometers)

Exercise No. 5.2

1. Solve the following:

- **a.**
  - m: 42 + 15 = 57
  - cm: 70 + 13 = 83
  - Answer: 57 m 83 cm

- **b.**
    - m: 4 + 0 = 4
    - cm: 54 + 13 = 67
    - Answer: 4 m 67 cm
- **c.**
    - m: 77 + 20 = 97
    - cm: 142 + 42 = 184
    - Answer: 97 m 184 cm
- **d.**
    - m: 21 + 14 = 35
    - cm: 34 + 20 = 54
    - Answer: 35 m 54 cm

2. Three pieces of wire are of lengths 13m 10cm, 20m 45cm and 34m 12cm. What is the total length of wires?

- Add the meters: 13 m + 20 m + 34 m = 67 m
- Add the centimeters: 10 cm + 45 cm + 12 cm = 67 cm
- Since 67 cm is greater than 100 cm, we convert it to 0.67 m and add it to the meter value.
- Total length: 67 m + 0.67 m = 67.67 m

Therefore, the total length of the wires is 67.67 meters.

3. Distance between Multan to Sahiwal is 125km 400m. Distance between Sahiwal to Lahore is 150km 260m. Find the total distance between Multan and Lahore.

- Add the kilometers: 125 km + 150 km = 275 km
- Add the meters: 400 m + 260 m = 660 m
- Since 660 m is greater than 1000 m, we convert it to 0.66 km and add it to the kilometer value.
- Total distance: 275 km + 0.66 km = 275.66 km

Exercise 5.3

1. Solve the following:

- **a.**
    - km: 45 - 14 = 31
    - m: 789 - 436 = 353
    - cm: 75 - 40 = 35
    - Answer: 31 km 353 m 35 cm
- **b.**
    - km: 5 - 2 = 3
    - m: 868 - 814 = 54
    - cm: 48 - 25 = 23
    - Answer: 3 km 54 m 23 cm

2. A shopkeeper sold 6m 5cm lace from a roll of 9m 87cm. How much lace is left in the roll?

- Subtract meters: 9 m - 6 m = 3 m
- Subtract centimeters: 87 cm - 5 cm = 82 cm
- Answer: 3 m 82 cm

3. Sultan travelled 425km 760m by bus and rickshaw to reach his village. If he travelled 420km 720m by bus, how much distance did he travel by rickshaw?

- Subtract kilometers: 425 km - 420 km = 5 km
- Subtract meters: 760 m - 720 m = 40 m
- Answer: 5 km 40 m

Exercise #5.4.1

Question: Identify the suitable unit to measure the weights of the following objects (g or kg):

- Chocolate: **g**
- Egg: **g**
- School bag: **kg**

- Mangoes: **kg**

Exercise #5.4.2

1. Solve the following:

- **a.**
    - kg: 8 + 3 = 11
    - g: 432 + 225 = 657
    - Answer: 11 kg 657 g
- **b.**
    - kg: 46 + 21 + 11 = 78
    - g: 500 + 135 + 240 = 875
    - Answer: 78 kg 875 g
- **c.**
    - kg: 315 + 220 + 323 = 858
    - g: 225 + 200 + 300 = 725
    - Answer: 858 kg 725 g

2. The weight of one box is 450g and the weight of another box is 240g. What is the total mass of both the boxes?

- 450g + 240g = 690g

3. A bag of rice contains 13kg 300g rice. How much sugar will be there in 2 such bags?

- 13 kg 300 g * 2 = 26 kg 600 g

4. Zubair bought 25kg 250g potatoes and 22kg 500g peas. What was the total mass of vegetables?

- 25 kg 250 g + 22 kg 500 g = 47 kg 750 g

5. Zahid bought 13kg 50g melons, 14kg 40g apples and 3kg 20g mangoes. What was the total mass of these fruits?

- 13 kg 50 g + 14 kg 40 g + 3 kg 20 g = 30 kg 110 g

Exercise #5.4.3

1. Solve the following:

- **a.**
    - kg: 28 - 20 = 8
    - g: 850 - 500 = 350
    - Answer: 8 kg 350 g
- **b.**
    - kg: 216 - 10 = 206
    - g: 759 - 302 = 457
    - Answer: 206 kg 457 g
- **c.**
    - kg: 856 - 250 = 606
    - g: 770 - 750 = 20
    - Answer: 606 kg 20 g
- **d.**
    - kg: 950 - 640 = 310
    - g: 998 - 450 = 548
    - Answer: 310 kg 548 g

2. Sajid bought 27kg 880g mangoes. Subhan bought 12kg 650g mangoes. How much more mangoes did Sajid buy than Subhan?

- kg: 27 - 12 = 15
- g: 880 - 650 = 230
- Answer: 15 kg 230 g

3. Azhar used 4kg 300g sugar from 7kg 400g. How much sugar was left with him?

- kg: 7 - 4 = 3
- g: 400 - 300 = 100
- Answer: 3 kg 100 g

Exercise #5.5

1. Identify the suitable units to measure the capacity of the following objects (ml or l):

- **Milk carton:** l (liters)
- **Soft drink bottle:** l (liters)
- **Teacup:** ml (milliliters)
- **Paint bucket:** l (liters)
- **Ink bottle:** ml (milliliters)
- **Water jug:** l (liters)

2. Measure the capacity. Tick the container with the maximum capacity.

- **a)** 600 ml
- **b)** 1800 ml
- **c)** 400 ml
- **d)** 1200 ml
- **e)** 800 ml
- **f)** 800 ml

Therefore, container b) has the maximum capacity.

Exercise #5.5.1

1. Solve the following:

- **a.**
  - l: 6 + 3 = 9
  - ml: 450 + 245 = 695
  - Answer: 9 l 695 ml
- **b.**
  - l: 5 + 2 = 7
  - ml: 150 + 700 = 850

    - Answer: 7 l 850 ml
- **c.**
    - l: 41 + 18 = 59
    - ml: 350 + 25 = 375
    - Answer: 59 l 375 ml
- **d.**
    - l: 11 + 40 + 14 = 65
    - ml: 615 + 560 + 40 = 1215
    - Answer: 65 l 1215 ml (Since 1215 ml is greater than 1000 ml, we can convert it to 1 l 215 ml. So the answer is 66 l 215 ml)

2. Azir took 550ml water in the morning and 320ml water in the evening. How much water did he take altogether?

- 550 ml + 320 ml = 870 ml

3. Hafeez filled 4L 21ml petrol in his motorcycle, while his brother filled 3L 10ml petrol in his scooter. How much petrol was filled in both of the vehicles?

- l: 4 + 3 = 7
- ml: 21 ml + 10 ml = 31 ml
- Answer: 7 L 31 ml

Exercise No. 5.5.2.1

1. Solve the following:

- **a.**
    - l: 31 - 18 = 13
    - ml: 250 - 25 = 225
    - Answer: 13 l 225 ml
- **b.**
    - l: 38 - 6 = 32
    - ml: 850 - 120 = 730

- Answer: 32 l 730 ml

- **c.**
  - l: 550 - 220 = 330
  - ml: 587 - 252 = 335
  - Answer: 330 l 335 ml

2. A water tank had 35L 560ml and 23L 330ml water was used for the service of the truck. How much water was left in the tank?

- l: 35 - 23 = 12
- ml: 560 - 330 = 230
- Answer: 12 l 230 ml

3. The bottles have 38L 856ml medicine. Rida used 15L 40ml of medicine from the bottles. How much medicine was left in the bottles?

- l: 38 - 15 = 23
- ml: 856 - 40 = 816
- Answer: 23 l 816 ml

4. Tick (✓) the correct option.

- **i. cm is used to measure short objects.** (✓)
- **ii. 1000m = 1 km** (✓)
- **iii. What is the abbreviation of unit of kilogram.**
  - **(a) kg** (✓)

Exercise No. 5.6

1. Write the temperature in the chosen units of each thermometer.

- **(a)**: 25°C
- **(b)**: 10°C
- **(c)**: 35°C
- **(d)**: 80°C

3. Compare the temperature using '>', '<', or '='.

- **a)** The temperature of container A **>** the temperature of container B. (20°C > 2°C)
- **b)** The temperature of container C **>** the temperature of container A. (35°C > 20°C)
- **c)** The temperature of container D **>** the temperature of container B. (100°C > 2°C)

UNIT #6

Exercise #6.1

Q1: **Read each statement and encircle a.m. or p.m accordingly**

i. Jimmy has cereals for breakfast.

- **a.m.** (Breakfast typically occurs in the morning)

ii. Did you play football last evening?

- **p.m.** ("Evening" refers to the time after midday.)

iii. We watched a scary movie last evening.

- **p.m.** (Similar to "ii", "evening" implies the time after midday.)

iv. I go to school around 8 o' clock everyday.

- **a.m.** (School usually starts in the morning.)

v. The sun rises in the morning.

- **a.m.** (Sunrise marks the beginning of the morning.)

2. Read the time and write a.m. or p.m. accordingly.

i. 2 o'clock at night. **p.m.** ii. 7 o' clock in the morning. **a.m.** iii. 10 o'clock at night. **p.m.** iv. 30 minutes after midnight. **a.m.** v. 8 o'clock at night. **p.m.** vi. 6 minutes after 12 noon. **p.m.**

3. Rewrite these times in order, starting from the earliest.

- 2:00 a.m.
- 4:00 a.m.
- 10:00 a.m.
- 12:00 noon
- 3:00 p.m.
- 4:00 p.m.

- 5:00 p.m.
- 7:00 p.m.

4. Read the time shown on the analog clock. Then convert the time into digital time and record your answers.

- **a)** 9:00
- **b)** 7:00
- **c)** 11:00
- **d)** 5:00

Exercise #6.2

Q1) **Solve these questions**

a) 85 hr + 75 hr

Answer: 160 hr

b) 08 hr + 03 hr

Anwer: 11 hr

c) 87 hr – 37 hr

Answer: 50 hr

d) 14 hr – 03 hr

Answer: 11 hr

2. Solve the following word problems.

- **a.** Razia wanted to cook delicious rice for her family. It took her 2 hours to prepare the ingredients and 1 hour to cook them. How long did it take her to get the rice ready to eat?
    - **Solution:** To find the total time, we need to add the time taken for preparation and cooking.
    - Total time = 2 hours (preparation) + 1 hour (cooking) = 3 hours

- **Answer:** It took Razia **3 hours** to get the rice ready to eat.

- **b.** Tariq spent 5 hours in school and then stayed on to play for 2 hours after that. How much time did he spend away from his home?
  - **Solution:** To find the total time spent away from home, we need to add the time spent in school and the time spent playing.
  - Total time = 5 hours (school) + 2 hours (play) = 7 hours
  - **Answer:** Tariq spent **7 hours** away from his home.
- **c.** Qasim left the home at 5 o'clock. He reached Rawalpindi after 5 hours. What was the time when he reached Rawalpindi?
  - **Solution:** To find the arrival time, we need to add the departure time to the travel time.
  - Arrival time = 5 o'clock (departure) + 5 hours (travel) = 10 o'clock
  - **Answer:** Qasim reached Rawalpindi at **10 o'clock.**

Exercise #6.3

a. Which day is on 4th June 2024?
Tuesday

b. Encircle your birthday on the calendar.
5^{TH} February

c. How many Sundays are there in March?
4

CH #7

Exercise No.7

3. Fill in the blanks with the correct answer.

- **a. A line has no** end point.
- **b. A point** is just a dot on the plane.
- **c. A line segment is a part of a line** with two endpoints.
- **d. A ray** is a part of a line with one endpoint.
- **e. A line** goes on infinitely in both directions.

- **f. A line segment** is a part of a line with two endpoints.

Exercise 7.4

i. This is a rectangle. To find the perimeter, we add up all the side lengths: Perimeter = 4cm + 11cm + 4cm + 11cm = **30cm**

ii. This is also a rectangle. Perimeter = 3cm + 3cm + 3cm + 3cm = **12cm**

iii. This is a triangle. Perimeter = 4cm + 7cm + 4cm = **15cm**

iv. This is a rectangle. Perimeter = 1cm + 3cm + 1cm + 3cm = **8cm**

Exercise 7.5

1. Find the area of the following:

- **i. Area of a Square:**
  - Formula: Area = side * side
  - Area = 4cm * 4cm = 16 square centimeters
- **ii. Area of a Parallelogram:**
  - Formula: Area = base * height
  - Area = 5cm * 3cm = 15 square centimeters
- **iii. Area of a Rectangle:**
  - Formula: Area = length * width
  - Area = 9cm * 8cm = 72 square centimeters

2. Find the area of a triangle whose base is 4 cm and perpendicular height is 2 cm.

- **Formula: Area of a Triangle = (1/2) * base * height**
- Area = (1/2) * 4cm * 2cm = 4 square centimeters

Exercise #7.6

1. Name these shapes.

- **a)** Hexagon (6 sides)

- **b)** Pentagon (5 sides)
- **c)** Octagon (8 sides)

Exercise 7.7

1) **Cylinder**
2) **Rectangular Prism (or Cuboid)**
3) **Hexagonal Prism**
4) **Triangular Pyramid**
5) **Square Pyramid**
6) **Pentagonal Prism**

UNIT #8

Exercise #8.1

a. How many girls like red colour?

- Answer: 25 girls

b. How many boys like blue colour?

- Answer: 20 boys

c. How many girls like blue colour?

- Answer: 18 girls

d. How many boys like red colour?

- Answer: 15 boys

e. How many boys like both colours?

- The table only provides the number of boys who like red and the number of boys who like blue. We cannot determine how many boys like both colors from this information.

f. How many girls like both colours?

- Similar to question (e), the table does not provide the number of girls who like both colors.

g. How many girls and boys like red colour?

- To find this, we add the number of girls who like red and the number of boys who like red: 25 girls + 15 boys = 40

- Answer: 40 girls and boys like red color

h. How many boys and girls like blue colour?

- To find this, we add the number of girls who like blue and the number of boys who like blue: 18 girls + 20 boys = 38
- Answer: 38 boys and girls like blue color

Exercise 8.2

Q1:

a. A newborn will be a girl.

- **Even Chance:** The probability of a newborn being a girl is generally considered to be around 50%.

b. The sky will turn dark tonight.

- **Certain:** The sky turns dark every night as part of the day-night cycle.

c. If today is a Friday, the next day will be a Wednesday.

- **Impossible:** The day after Friday is Saturday.

d. I will find money on the ground.

- **Unlikely:** While it's possible, finding money on the ground is not a very common occurrence.

e. I will see a black car today.

- **Likely:** Black is a popular color for cars, so it's likely you'll see one during the day.

2. Bina has some shapes in a jar. Fill in the blanks with 'likely', 'unlikely', 'impossible' or 'even chance'.

- **a. It is unlikely** that Bina picks a star. (We don't have information about the shapes in the jar, so it's unlikely she'd pick a star unless stars are present)
- **b. It is likely** that Bina picks a triangle. (Again, depending on the shapes in the jar, picking a triangle could be likely if triangles are abundant)
- **c. It is impossible** that Bina picks a circle. (If there are no circles in the jar, it's impossible to pick one)
- **d. There is an even chance** that Bina will pick a square or a triangle. (Assuming squares and triangles are present in equal numbers, the chance of picking either is equal)

3. Mark each event as per the probability line.

- **a. 16 is a prime number.** (Unlikely) - Prime numbers are divisible only by 1 and themselves. 16 is divisible by 2, 4, and 8.
- **b. I will see someone cycling today.** (Likely) - Cycling is a common mode of transportation.
- **c. Rolling a number less than 7 on a dice.** (Certain) - A standard dice has numbers 1 to 6.
- **d. Obtaining a correct answer in a true/false question.** (Even Chance) - There are two possible outcomes (true or false).
- **e. Today is a holiday.** (Unlikely) - Holidays are not every day.

4. Look at the spinner and answer the questions.

- **a. What alphabet is the spinner most likely to land on?** C (There are three C's on the spinner)
- **b. Which of the alphabets is the spinner equally likely to land on?** A and B (Both appear twice on the spinner)
- **c. What is the probability that the spinner will land on C?** 3/6 or 1/2 (There are three C's out of six total sections)