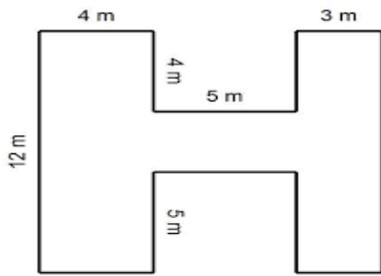


Ch 11 Perimeter, Area and Volume

- Q1 Choose the correct option
1. A rectangular playground has a length of 45 m and a width of 30 m. What is its perimeter?
a) 150 m b) 180 m c) 75 m d) 135 m
 2. The perimeter of a square is 64 meters. What is its side length?
a) 8 m b) 12 m c) 16 m d) 32 m
 3. A cubical box has a side length of 6 cm. What is its volume?
a) 36 cm^3 b) 216 cm^3 c) 108 cm^3 d) 120 cm^3
 4. A farmer wants to fence his square-shaped field of side 40 m. What will be the cost of fencing at ₹5 per meter?
a) ₹400 b) ₹800 c) ₹1,000 d) ₹200
 5. **Assertion:** A rectangle with a length of 10 cm and a width of 5 cm has an area of 50 cm^2 .
Reason: Area of a rectangle = length + breadth
a) Both statements are true, and the reason correctly explains the assertion.
b) Both statements are true, but the reason does not explain the assertion.
c) Assertion is true, but the reason is false.
d) Both statements are false.
 6. **Assertion:** The perimeter of a square with a side length of 7 cm is 28 cm.
Reason: The perimeter of a square is found using the formula $4 \times \text{side length}$.
a) Both statements are true, and the reason correctly explains the assertion.
b) Both statements are true, but the reason does not explain the assertion.
c) Assertion is true, but the reason is false.
d) Both statements are false.

Q2 Solve the following

1. A farmer has three fields of sizes $40 \text{ m} \times 20 \text{ m}$, $30 \text{ m} \times 15 \text{ m}$, and $25 \text{ m} \times 10 \text{ m}$. What is the total area of all three fields?
2. A square park has a perimeter of 80 metres. Find its area.
3. Find the perimeter of the given figure:



4. A water tank has a volume of 300 cubic metres and a base area of 50 square metres. Find its height.
- Q3. **Solve the following**
1. a) A box is 12 m long, 8 m wide, and 5 m high. If it is filled to three-fourths of its height, how much volume of water is inside?
b) A room has a floor size of 12 m \times 10 m. How many 2 m \times 2 m tiles are needed to cover the floor?
 2. a) A 10 cm \times 6 cm rectangular sheet is cut into two equal parts along its longer side. What is the area of each part?
b) A cube with a side of 4 cm is made up of small 1 cm cubes. How many small cubes are needed?
- Q4. **Case study**
1. A school wants to renovate its playground. The playground is a rectangular area of 50 m \times 30 m. The school plans to cover half the area with artificial grass and the remaining half with a running track.
 - a) What is the total area of the playground?
 - b) How much area will be covered with artificial grass?
 - c) If the cost of covering 1 square metre with artificial grass is ₹4, what is the total cost?
 2. A housing society has a cuboidal underground water tank that is 8 m long, 5 m wide, and 4 m high. The residents use 2,000 litres of water daily for their daily needs.
 - Find the total volume of the water tank in cubic metres.
 - If a new tank of the same height but double the length is built, what will be its new volume?
 - Convert the volume into litres. (1 cubic meter = 1,000 litres)

Ch 12 Metric measures

Q1. Choose the correct option

1. A runner completes a race of 5 kilometers. How many meters did the runner cover?
a) 50 meters. b) 500 meters. c) 5,000 meters. d) 50,000 meters
2. Which is the lightest in weight?
a) 200 grams. b) 2 kilograms c) 1.5 kilograms. d) 500 grams
3. A farmer has 3 hectoliters (hL) of milk. How many liters does he have?
a) 3 L. b) 30 L c) 300 L. d) 3,000 L
4. A medicine bottle contains 500 milliliters (mL) of syrup. How many liters is this?
a) 0.5 L. b) 5 L c) 50 L. d) 500 L
5. Assertion (A): 5 hectometer = 500 meters.
Reason (R): 1 hectometer is equal to 10 centimeters
A) Both A and R are true, and R is the correct explanation of A.
B) Both A and R are true, but R is NOT the correct explanation of A.
C) A is true, but R is false.
D) A is false, but R is true.

Q2. Solve the following

1. A school building is 72 meters tall, and a hospital building is 95 meters tall. What is the difference in their heights?
2. A pharmacist is measuring the weight of a medicine. The packet label says the medicine weighs 85 milligrams (mg). How much is this weight in grams (g)?
3. A water storage tank in a school can hold 60,000 decilitres (dL) of water. The school staff needs to record the capacity in Liters (L) for their records. How many Liters of water does the tank hold?

Q3. Solve the following

1. a) A fruit seller buys 108 hectograms (hg) of apples and needs to record the weight in kilograms (kg) for billing. How many kilograms of apples does he have?
b) A pack of biscuits contains 20 biscuits in it. Find the weight of the packet if each biscuit weighs 75g.
2. A can containing 55 L and 350 mL of kerosene oil was bought to put in a generator. If the generator takes up 5litres of Kerosene oil, approximately, how many times can the generator be filled up from the can?

Q4. Case Study

1. A farmer is using three different containers to store water for his farm. The dimensions of the containers are as follows:
 1. **Container A:** A cuboid with a length of 6 m, a width of 4 m, and a height of 3 m.
 2. **Container B:** A cube with each side measuring 5 m.
 3. **Container C:** A cylindrical container with a radius of 2 m and a height of 7 m.

Questions:

- a. What is the volume of water each container can hold?
- b. Which container can hold the most water?
- c. If the farmer wants to store exactly 300 cubic meters of water, which container(s) should he use to avoid overflow?

Ch 15 Symmetry

Q1 Choose the correct option

1. A regular pentagon has _____ lines of symmetry.
a. 2 b. 3 c. 4 d. 5
2. Identify the image which has only one line of symmetry.



3. **Assertion:** The numbers that can be arranged in a triangular pattern are called triangular numbers.

Reasoning: When we add consecutive odd numbers, we get triangular numbers.

Options:

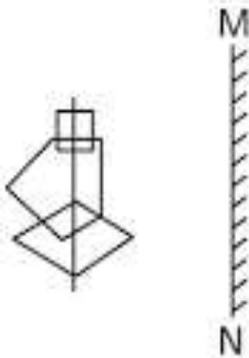
- a. Both (A) and (R) are true and (R) is the correct explanation of (A).

- b. Both (A) and (R) are true but (R) is not the correct explanation of (A).
- c. (A) is correct but (R) is wrong
- d. (A) is false but (R) is true

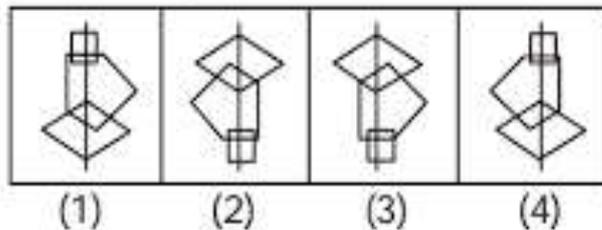
Q2 Solve the following

1. Find a palindrome number starting with.
 - a. 258
 - b. 41
2. For the following given figures, which one is the mirror line?

Question Figure :



Answer Figures :



3. Write the letters of the word TECHNOLOGY which have no line of symmetry.
4. Find a square number by adding odd numbers
 - a. 64
 - b. 25
5. If **CAT** is written as **DBU**, **DOG** is written as _____

Q3. Solve the following:

1. Write the values of a, b, c, d and e using numbers from 1 to 9 such that the sum of the number in each row, column and diagonal is 15.

4	a	b
c	d	7
8	1	e

2. Write the square number 64 as the sum of 8 odd consecutive numbers.
3. In a certain code LIBERATE is written as 56403170, what will be the code for:
 - a) TRIBAL
 - b) LITERATE
 - c) TABLE

Q4. Case Study

1. Rahul is very fond of colouring. He uses poster colours for making paintings. One day his younger brother Rohan by mistake dropped his colours on a white sheet of paper and to hide his mistake he folded the sheet of paper and kept it in his notebook. The next day on opening it he found a beautiful design.
 - i) What type of image did he mistakenly make?
 - ii) How many lines of symmetry does it have?



CH 14 Money

Q1. Choose the correct option

1 A shop sells rice in two different packs:

Pack A: 5 kg for ₹250

Pack B: 8 kg for ₹400

Which pack is a better deal based on the price per kg?

- a) Pack A. b) Pack B c) Both are the same. d) Cannot be determined
2. Ravi earns ₹54,000 in 6 months. How much does he earn in one month?
a) ₹8,000 b) ₹9,000 c) ₹9,500 d) ₹10,000
3. Rohan bought a bicycle for ₹6,500 but sold it for ₹5,800. What was his loss?
a) ₹600 b) ₹700 c) ₹800 d) ₹900
4. A furniture shopkeeper bought a dining table for ₹12,500 and sold it at a loss of ₹1,750. What was the selling price?
a) ₹10,750. b) ₹11,250 c) ₹11,500 d) ₹12,000
5. **Assertion (A):** If the Selling Price (SP) is greater than the Cost Price (CP), there is a profit.
Reason (R): Profit is calculated as the difference between SP and CP, i.e., Profit = SP - CP.
a) Both A and R are true, and R correctly explains A.
b) Both A and R are true, but R does not explain A.
c) A is true, but R is false.
d) A is false, but R is true.

Q2 Solve the following

1. Sita bought a wooden dining table for ₹25,000 and spent ₹2,500 on polishing. She later sold it for ₹30,500. How much was her profit or loss?
2. Raj bought a laptop for ₹55,000 and had to spend ₹5,000 on repairs. He later sold it for ₹57,500. Find his gain or loss.
3. Anil purchased a washing machine for ₹22,000. After using it for a year, he sold it at a loss of ₹3,500. Find the Selling Price (SP).

Q3 Solve the following

- Riya bought a laptop for ₹40,000 but had to sell it at a loss of ₹4,750. What is the Selling Price (SP)?
 - Ramesh bought a watch for ₹1,200 and sold it for ₹150 less than the Cost Price. Find the Selling Price (SP).
- Priya bought a handbag for ₹1,800 and sold it for ₹250 less than its Cost Price. What was the Selling Price (SP)?

Q4 Case Study

- Riya is a Grade 5 student. Her parents give her ₹500 as pocket money every month. She uses the money for her school canteen, stationery, and saving for her favourite toy, which costs ₹2,000. Below is her monthly spending breakdown:
 - School Canteen: ₹250
 - Stationery: ₹100
 - Savings: ₹150
 - How much money does Riya save in 4 months?
 - How long will it take Riya to save enough to buy her favourite toy?
 - If Riya spends ₹50 less on stationery every month, how much will she save in 6 months?
 - If Riya's parents increase her pocket money by ₹100 per month, how much money will she receive in a year?

Time

Q1. Choose the correct option

- How many minutes are there in 3 hours?
 - 120 minutes
 - 150 minutes
 - 180 minutes
 - 200 minutes
- If a clock shows 4:45 PM, what time will it show after 1 hour and 20 minutes?
 - 6:05 PM
 - 5:55 PM
 - 6:15 PM
 - 5:05 PM

3. A train departs at 10:30 AM and reaches its destination at 2:15 PM. What is the total travel time?
 - a) 3 hours 45 minutes
 - b) 4 hours 15 minutes
 - c) 4 hours 45 minutes
 - d) 5 hours
4. If the current time is 9:20 AM, what was the time 2 hours 55 minutes ago?
 - a) 6:25 AM
 - b) 6:30 AM
 - c) 7:45 AM
 - d) 8:05 AM
5. Which of the following is the correct 24-hour format for 7:45 PM?
 - a) 19:45
 - b) 07:45
 - c) 17:45
 - d) 21:45

Q2. Solve the following

1. A bus journey starts at 6:30 AM and lasts for 5 hours 20 minutes. At what time will the journey end?
2. Reena starts her homework at 4:15 PM and takes 1 hour 40 minutes to complete it. At what time does she finish her homework?
3. A train departs from Station A at 11:20 AM and reaches Station B at 4:50 PM. Find the total travel time.

Q3. Solve the following

1. A movie starts at 3:25 PM and lasts for 2 hours 15 minutes. What time will it end?
2. A sports event begins at 10:45 AM and ends at 2:20 PM. Calculate the total duration of the event.
3. If the train leaves the station at 8:10 AM and takes 3 hours 35 minutes to reach the next station, what time does it arrive?

Q4. Case Study (Railway Time Table)

Below is a railway time table for a train journey:

Station Arrival Time Departure Time

A	-	08:00 AM
B	09:30 AM	09:35 AM
C	11:15 AM	11:20 AM
D	01:00 PM	-

Answer the following questions:

- a) How long does the train take to travel from Station A to Station C?
- b) How much time does the train stop at Station B?
- c) What is the total travel time from Station A to Station D?

d) If the train is delayed by 30 minutes at Station B, what will be the new departure time from Station C?

Read the following railway time table and answer the following questions

Mumbai to Kolhapur Train Timetable:

Train Name	Train Number	Departure Station	Departure Time	Arrival Station	Arrival Time
Tutari Express	11003	Dadar Central (DR)	12:05 AM	Kolhapur (KOP)	11:05 AM
Koyna Express	11029	CSMT	08:40 AM	Kolhapur (KOP)	08:25 PM
Mahalaxmi Express	17411	CSMT	08:20 PM	Kolhapur (KOP)	07:20 AM

1. Which train has the shortest travel duration from Mumbai to Kolhapur?
2. What is the departure time of the Tutari Express from Dadar Central?
3. What is the departure time of the Tutari Express from Dadar Central?
4. What is the duration of Koyna Express?