Perimeter, Area and Volume
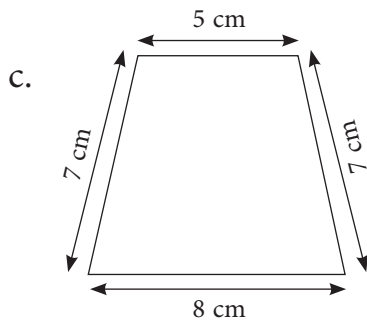
10

Q1. Find the perimeter of the following figures:

a.

5 cm
4 cm

Perimeter: _____

b.

5 cm
5 cm

Perimeter: _____

c.

5 cm
7 cm
7 cm
8 cm
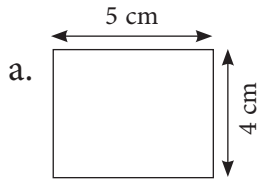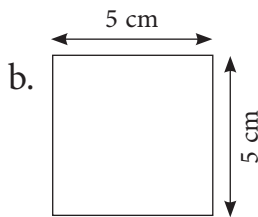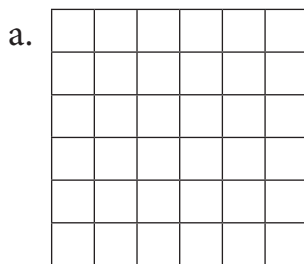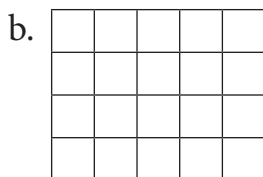
Perimeter: _____

Q2. Find the area of the following figures. Assume the area of each square to be 1 cm².

a.

Area: _____

b.

Area: _____

Q3. Find the area of the following figures:
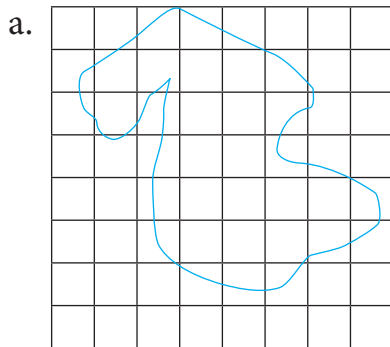
a.

5.2 cm

Area: _____

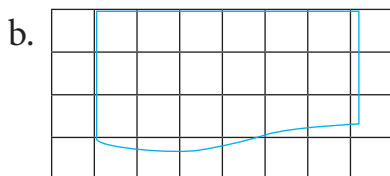b.

2.5 m

7 m
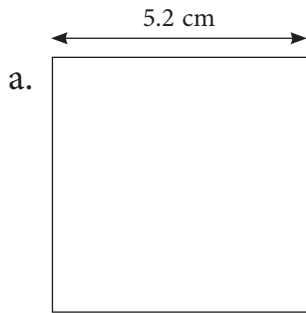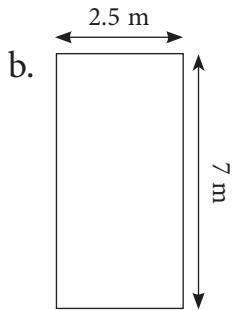
Area: _____

Q4. Find the length of a rectangle whose area is 273 m^2 and breadth is 7 m.

Answer: _____

Q5. Assuming each square to be 1 cm^2, find the approximate area of each figure:

a.

Area: _____

b.

Area: _____

Q6. Calculate the area of the given figure by dividing it into rectangles and triangles:
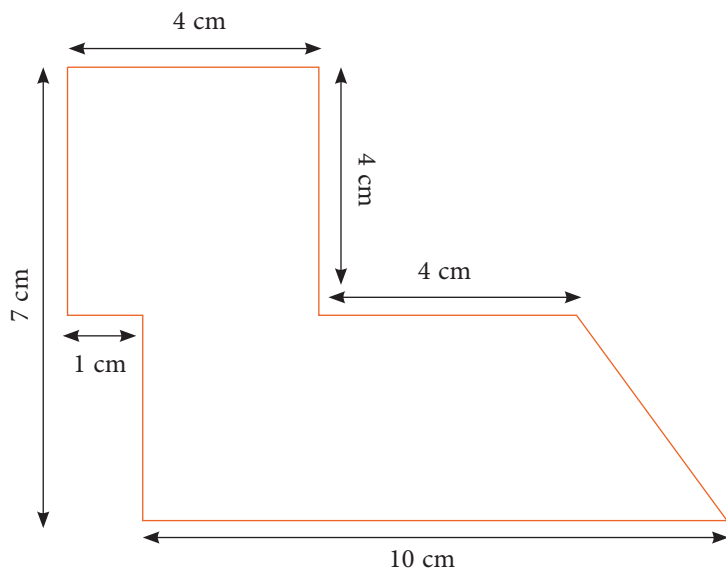
Area = _____

Q7. Find the area of a right angled triangle formed by joining the diagonals of:

  a. A square of each side 5 cm

   Area: _____

  b. A rectangle of length 4 cm and breadth 3.5 cm

   Area: _____

Q8. Complete the missing entries in the following table:

Base of the triangle	Height of the triangle	Area of the triangle
12 cm	5 cm	
6 cm		15 cm^2
	7 cm	21 cm^2

Q9. Count the cubes and find the volume:

(Assume the volume of each cube as 1 cm^3)

a.

Volume: _____

b.
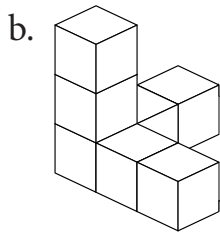
Volume: _____

Q10. Look at the following figures and fill in the length, breadth, height and volume of the following cuboids in the table:
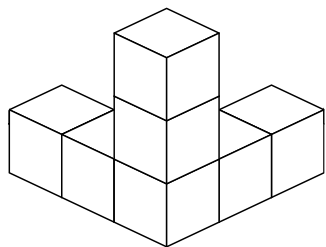
a.

b.
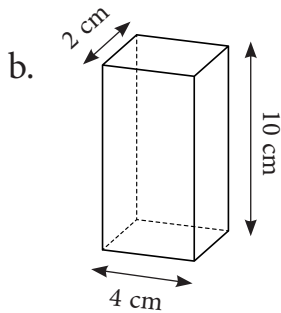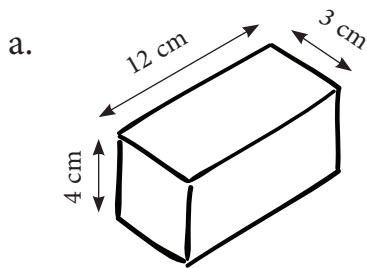
Length	Breadth	Height	Volume

Q11. Tick the correct option:

Out of the following which has more area?

a. A square of side 7.5 cm

b. A rectangle having length 3.5 cm and breadth 4.5 cm

Answer: _____

Q12. Find the area of each of the following triangles:

a.

6 cm

5 cm

Area = _____

b.

4 cm

b = 5 m

Area = _____
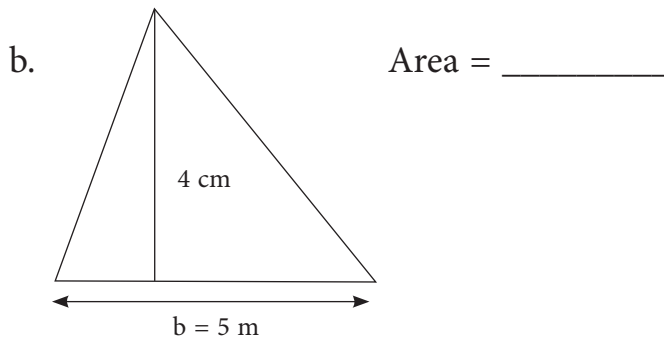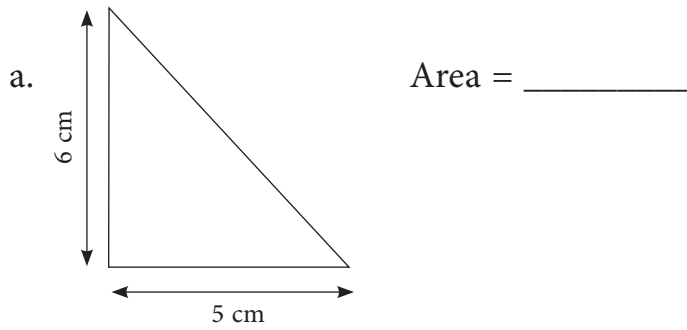
Q13. The following table shows the dimensions and volume of different cuboids. Fill in the missing entries in the table:

Length	Breadth	Height	Volume
5 cm	2 cm		70 cm^3
	3 cm	2 cm	54 cm ^{3}
10 cm		5 cm	200 cm^3

Q14. A cuboid has 4 cm length and 2 cm breadth. Find the height of the cuboid if it has the same volume as a cube of side 4 cm.

Answer: _____

5

Q15. Tick the correct option:

What should we calculate if we have to find:

	Perimeter	Area	Volume
The cost of digging a pit			
The cost of painting a wall			
How much wooden border to be purchased for making a photo frame			
The cost of paving the surface with tiles			
How much oil can be filled in a box			
How much space will a carpet cover			
How much ribbon to buy for putting around a table cover			

ANSWERS

1. a. 18 cm;   b. 20 cm;   c. 27 cm

2. a. 36 cm²;   b. 20 cm²

3. a. 27.04 cm²;   b. 17.5 m²

4. 39 m

5. a. 24 cm²;   b. 18 cm²

6. 41.5 cm²

7. a. 12.5 cm²;   b. 7 cm²

8.

Base of the triangle	Height of the triangle	Area of the triangle
12 cm	5 cm	30 cm²
6 cm	5 cm	15 cm²
6 cm	7 cm	21 cm²

9. a. 7 cm³;   b. 7 cm³

10.

Length	Breadth	Height	Volume
12 m	3 m	4 m	m³
10 m	4 m	2 m	80 m³

11. (a) Square has more area

12. a. 15 m²;   b. 10 m²

13.

Length	Breadth	Height	Volume
5 cm	2 cm	7 cm	m³
9 cm	3 cm	2 cm	m³
10 cm	4 cm	5 cm	200 cm³

14. 8 cm

15.

	Perimeter	Area	Volume
The cost of digging a pit			✓
The cost of painting a wall		✓	
How much wooden border to be purchased for making a photo frame	✓		
The cost of paving the surface with tiles		✓	
How much oil can be filled in a box			✓
How much space will a carpet cover		✓	
How much ribbon to buy for putting around a table cover	✓		