

**MONTH : NOVEMBER**

**SESSION : 18**

**CLASS : V**

**SUBJECT : MATHEMATICS**

**CHAPTER NUMBER: 15**

**CHAPTER NAME : GEOMETRY**

**SUB-TOPIC : TRIANGLES , TYPES OF TRIANGLES AND**

**AREA OF TRIANGLES .**

**EX-15 B**

**CHANGING YOUR TOMORROW**

## **LEARNING OBJECTIVE :**

**Enable learners :**

- **To identify triangles , types of triangles**
- **To find the area of the triangles .**

# TRIANGLES

A closed shape having 3 sides is a triangle.

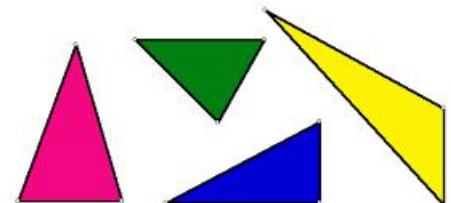
## Types of triangles

### According to sides

Equilateral

Isosceles

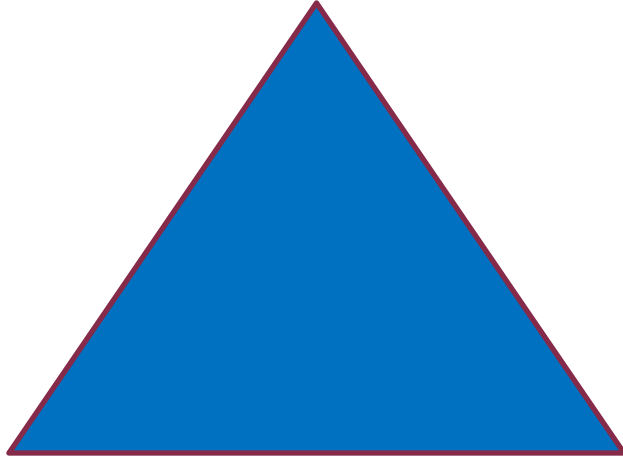
Scalene



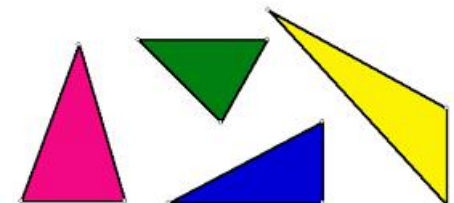
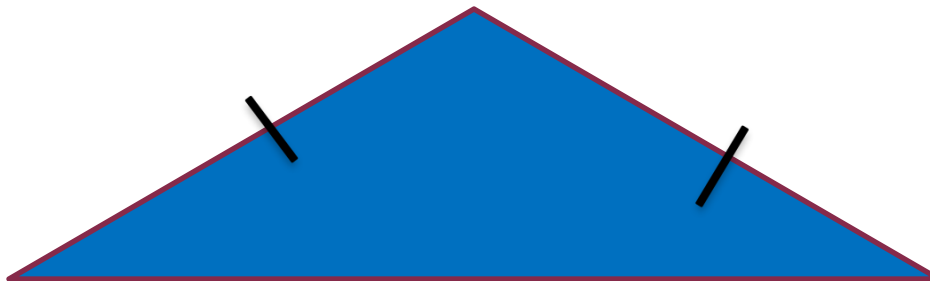
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# Types of triangles

**Equilateral:** A triangle whose all sides are equal.

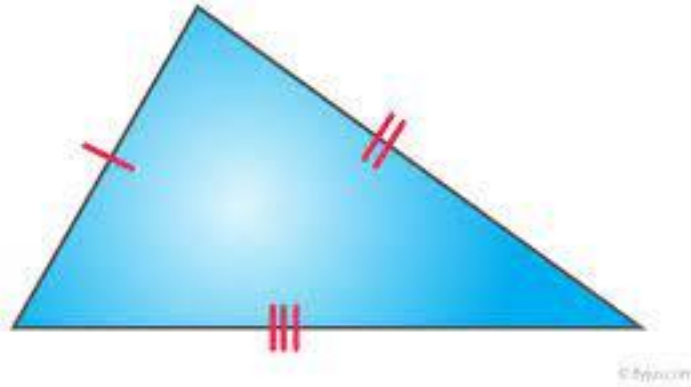


**Isosceles:** A triangle whose any 2 sides are equal.



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**Scalene : a triangle whose non of the side are equal.**



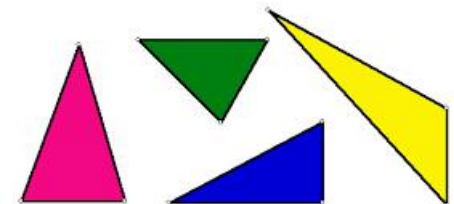
## Types of triangles

### According to angles

Acute

Obtuse

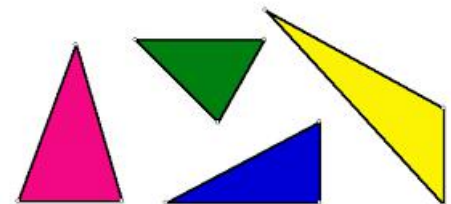
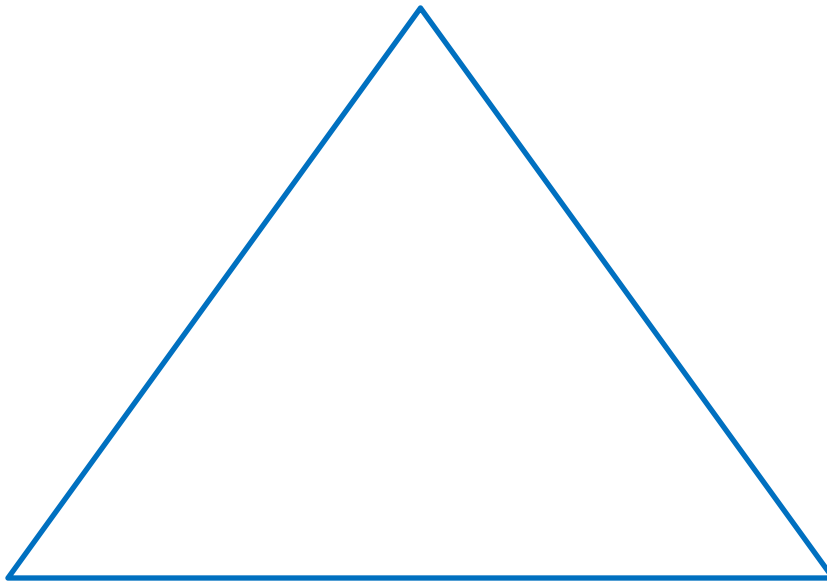
Right



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# Types of triangles

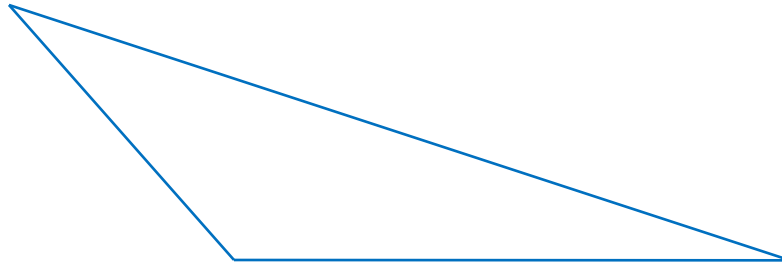
Acute : all angles are less than  $90^\circ$



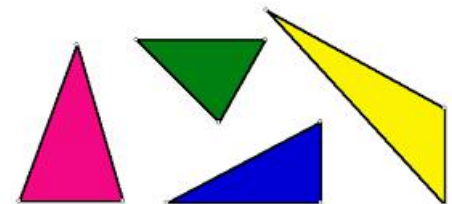
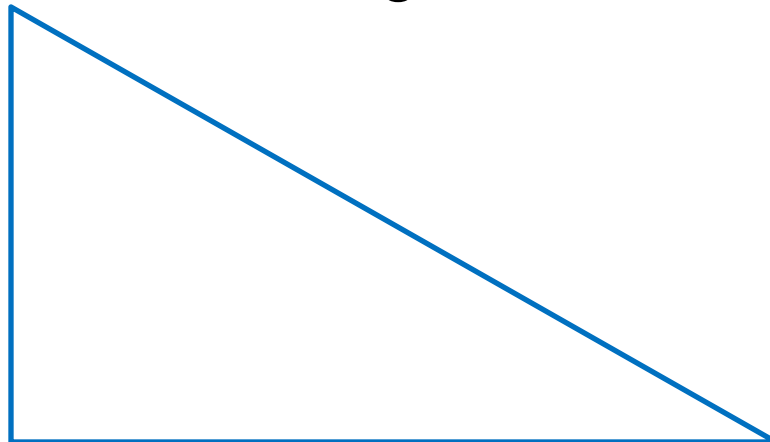
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# Types of triangles

Obtuse : one of the angles should be more than  $90^\circ$ .



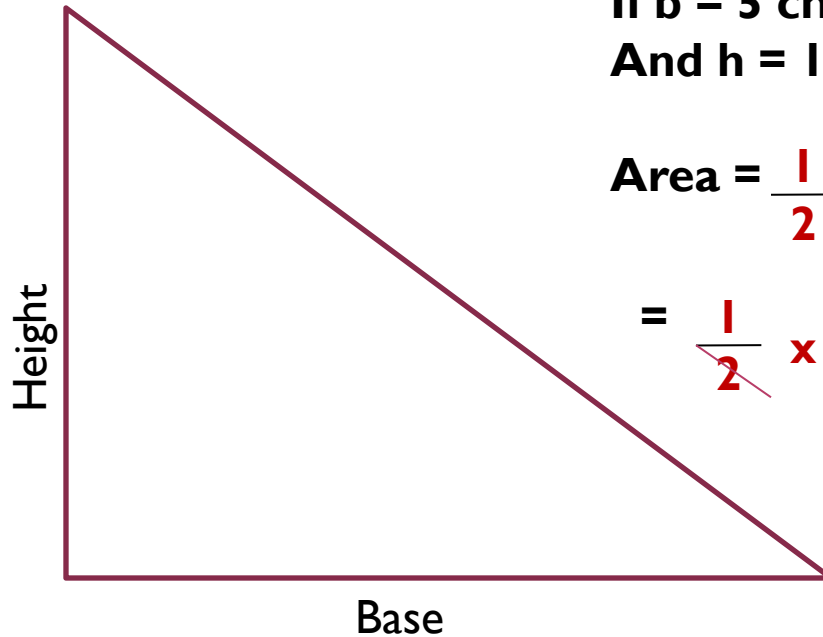
Right: one of the angles should be equal to  $90^\circ$ .



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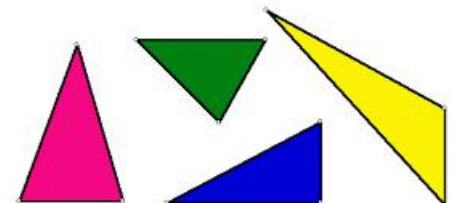
# Area of triangles

The area of triangle =  $\frac{1}{2}$  x base x height



If b = 5 cm  
And h = 12 cm

$$\begin{aligned} \text{Area} &= \frac{1}{2} \times \text{base} \times \text{height} \\ &= \frac{1}{2} \times 5 \times 12 = 30 \text{ sq.cm} \end{aligned}$$



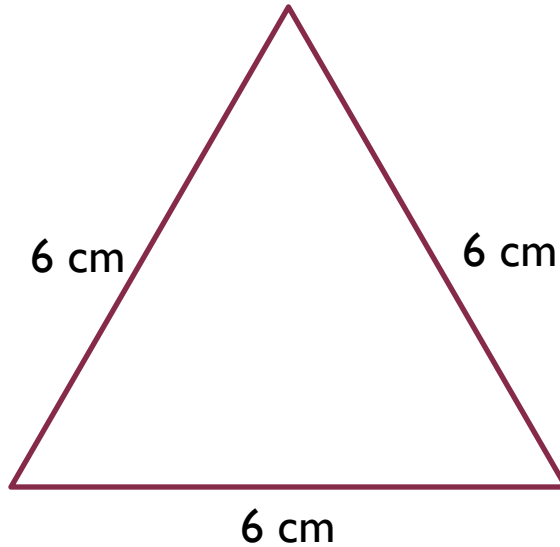
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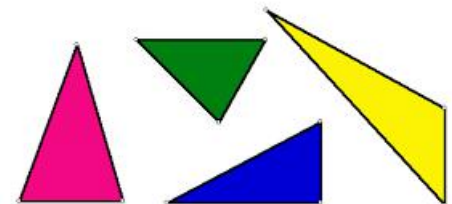
## EXERCISE- 15B

### I. Classify the following triangles.

a.



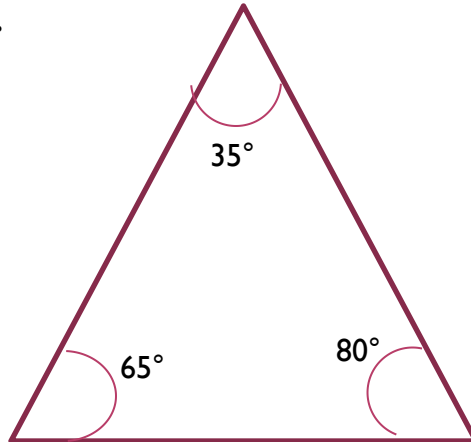
**Equilateral triangles**



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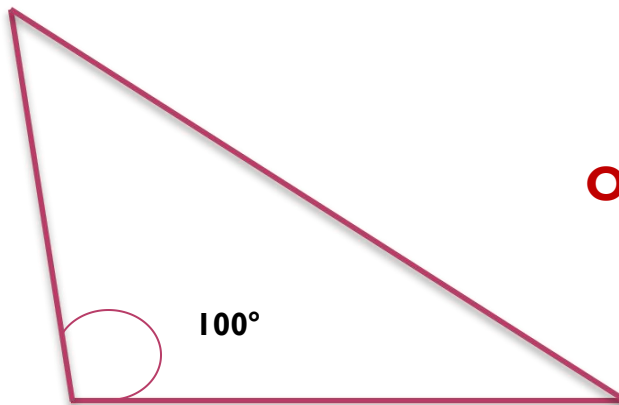
## EXERCISE- 15B

b.

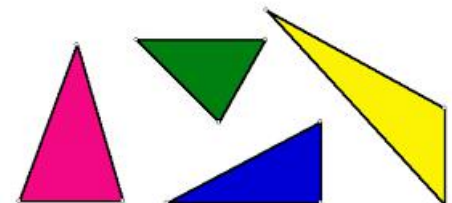


**Acute triangle**

c.



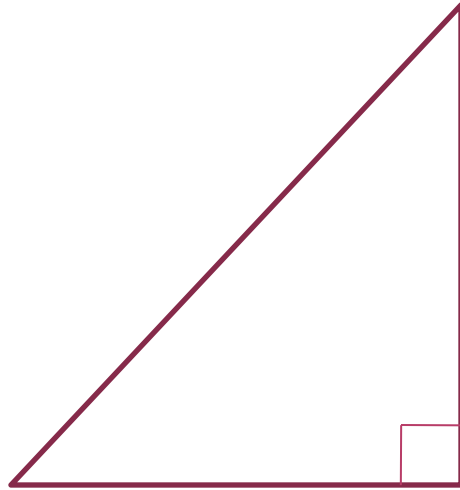
**Obtuse triangle**



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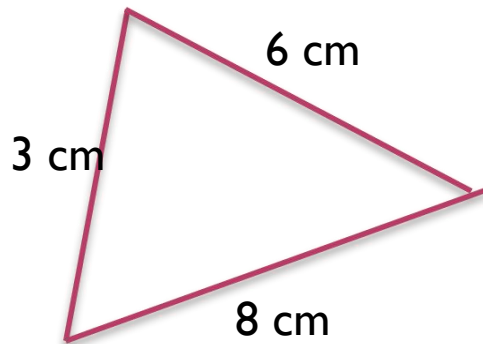
## EXERCISE- 15B

d.

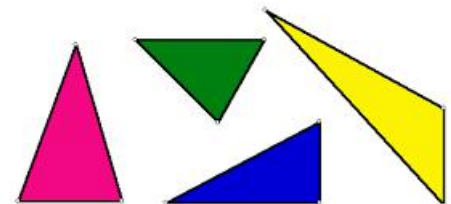


**Right triangle**

e.



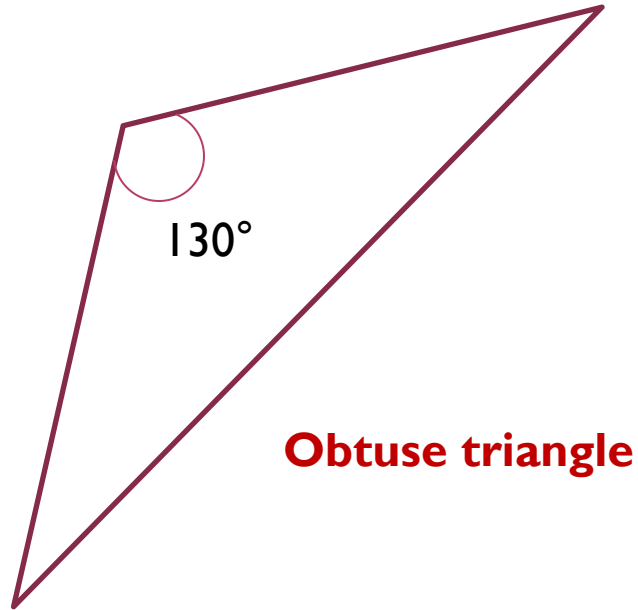
**Scalene triangle.**



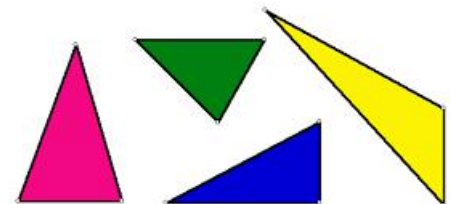
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## EXERCISE- 15B

f.



**Obtuse triangle**

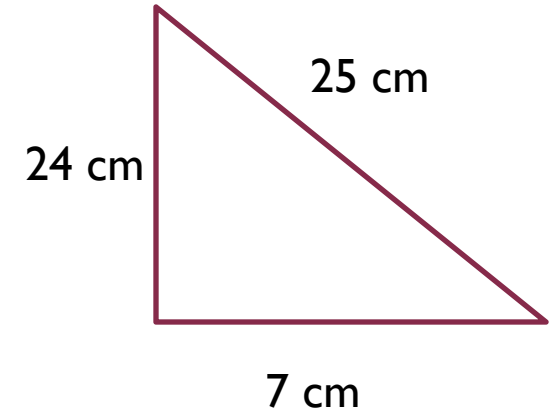


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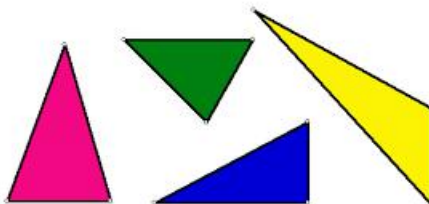
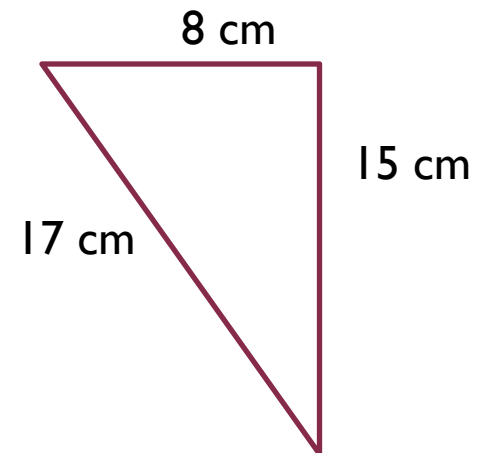
## EXERCISE- 15B

### 2. Find the area.

a. Area =  $\frac{1}{2}$  x base x height  
=  $\frac{1}{2}$  x ~~7~~<sup>12</sup> x ~~24~~ = 84 sq.cm



b. Area =  $\frac{1}{2}$  x base x height  
=  $\frac{1}{2}$  x ~~8~~<sup>4</sup> x 15 = 60 sq.cm

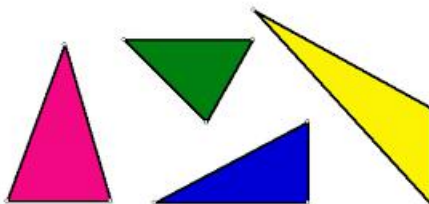
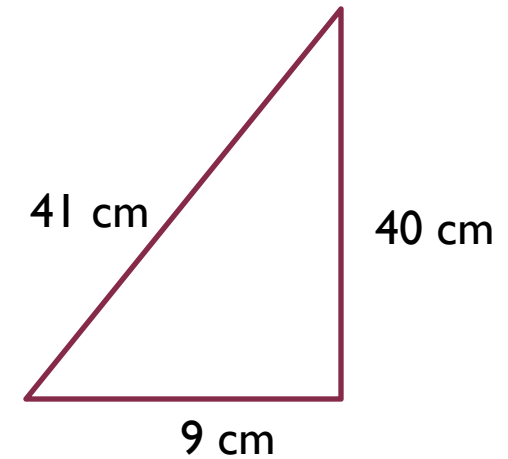


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## EXERCISE- 15B

c. Area =  $\frac{1}{2}$  x base x height

=  $\frac{1}{2}$  x ~~9~~ x <sup>20</sup>~~40~~ = 180 sq.cm



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# Learning Outcomes

## Students are able:

- To identify triangles , types of triangles
- To find the area of the triangles .

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**