

**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**

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**CHANGING YOUR TOMORROW**

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## **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.

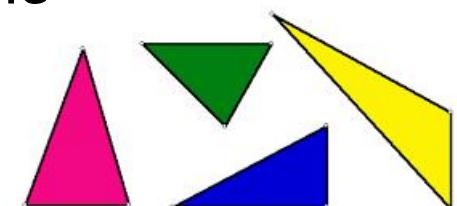
## Types of triangles

### According to sides

Equilateral

Isosceles

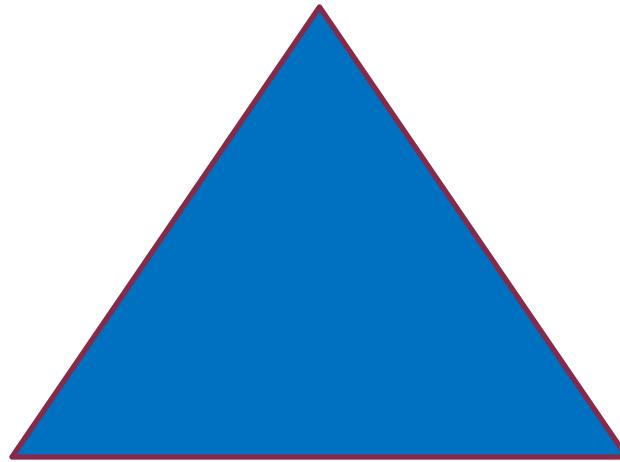
Scalene



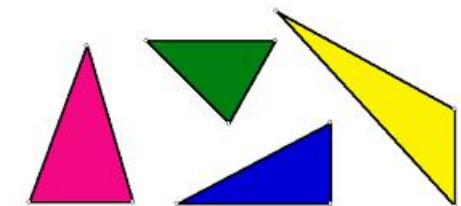
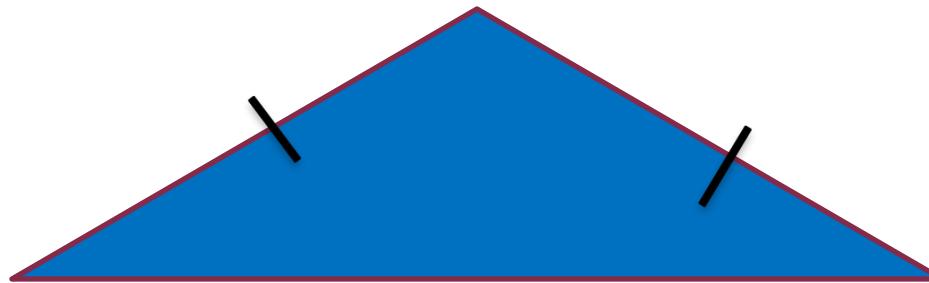
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# Types of triangles

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

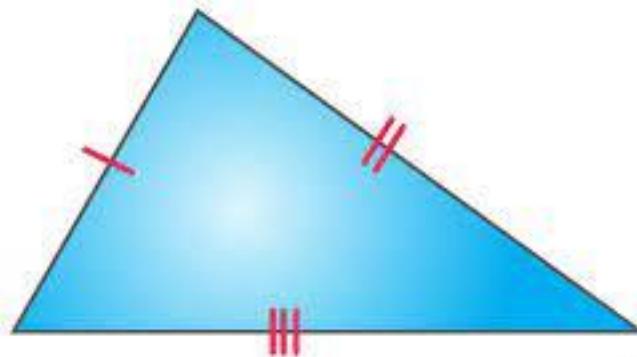


**Isosceles:** A triangle whose any 2 sides are equal.



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



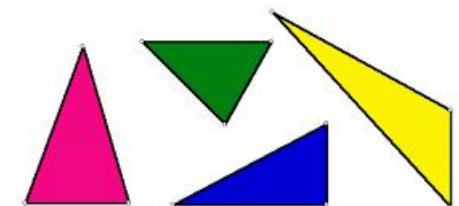
## Types of triangles

### According to angles

Acute

Obtuse

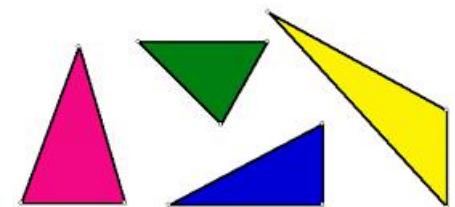
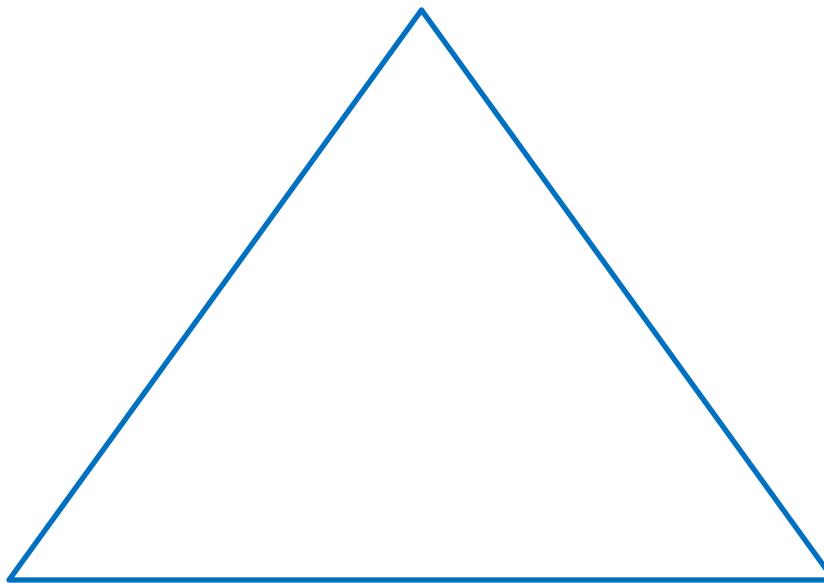
Right



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## Types of triangles

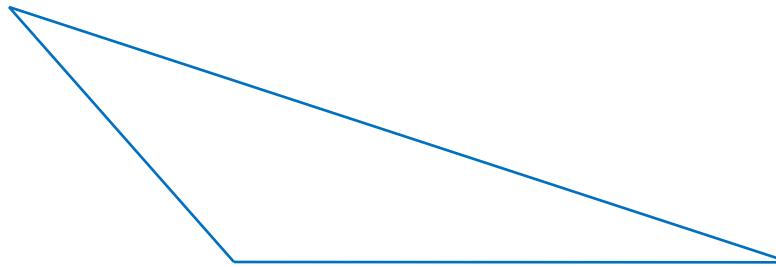
Acute : all angles are less than  $90^\circ$



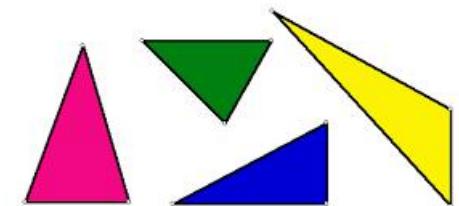
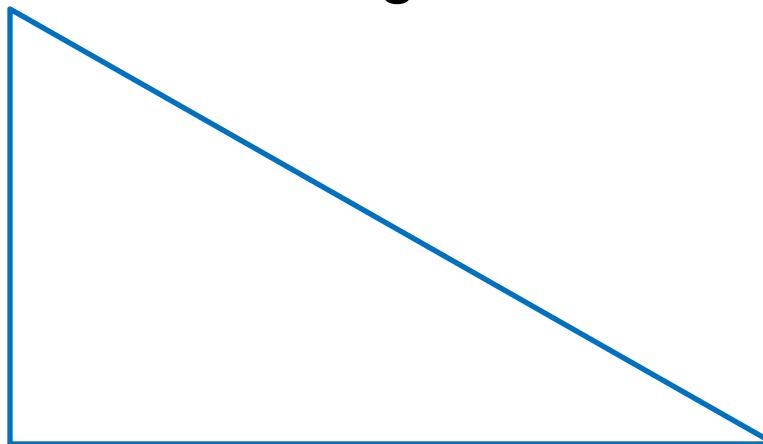
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## Types of triangles

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



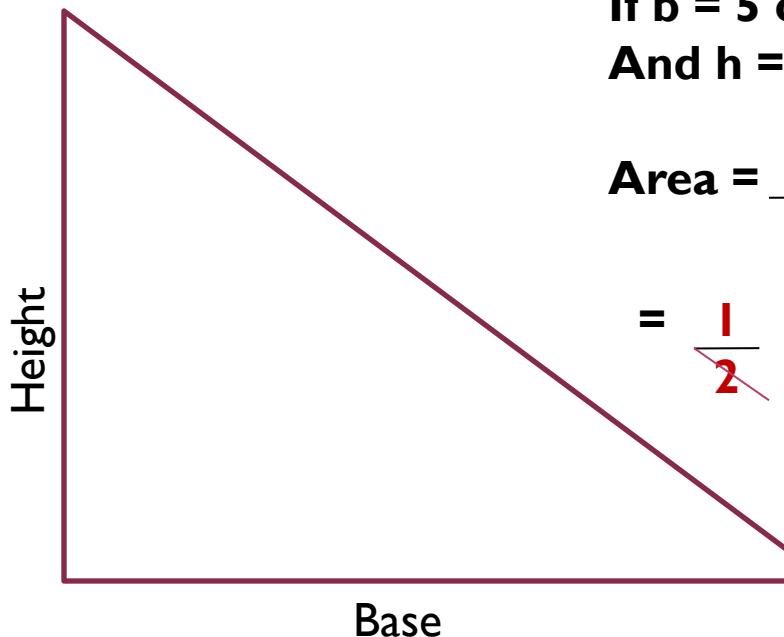
Right: one of the angles should be equal to  $90^\circ$ .



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# Area of triangles

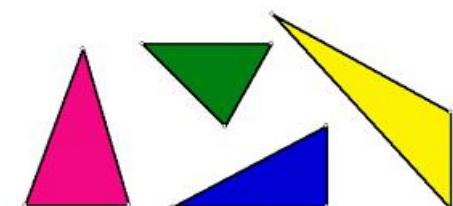
The area of triangle =  $\frac{1}{2} \times \text{base} \times \text{height}$



If  $b = 5 \text{ cm}$   
And  $h = 12 \text{ cm}$

**Area =  $\frac{1}{2} \times \text{base} \times \text{height}$**

$$= \frac{1}{2} \times 5 \times 12 = 30 \text{ sq.cm}$$

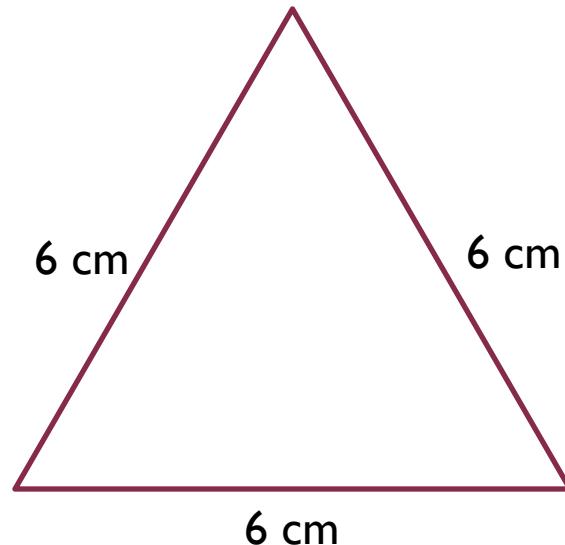


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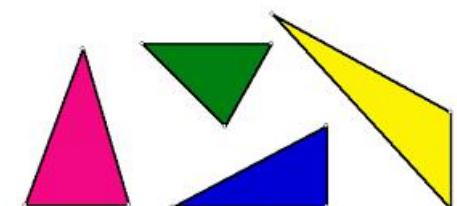
## EXERCISE- 15B

I. Classify the following triangles.

a.



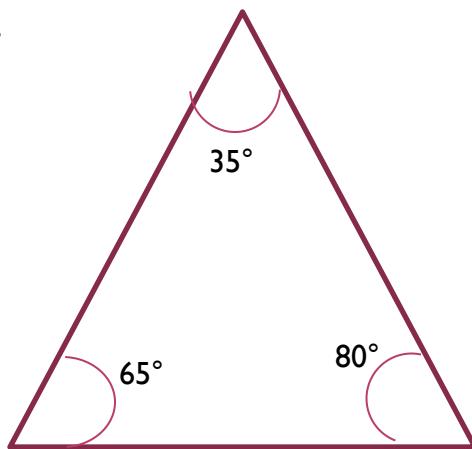
**Equilateral triangles**



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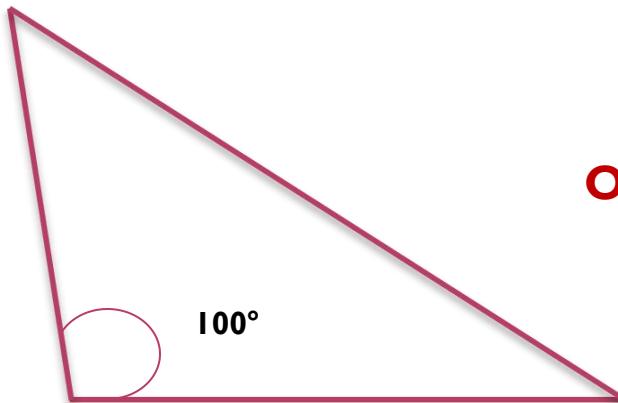
## EXERCISE- 15B

b.

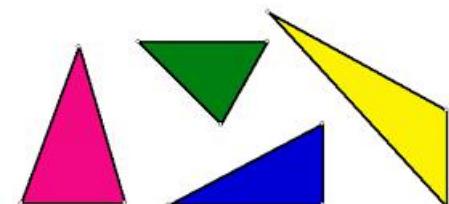


**Acute triangle**

c.



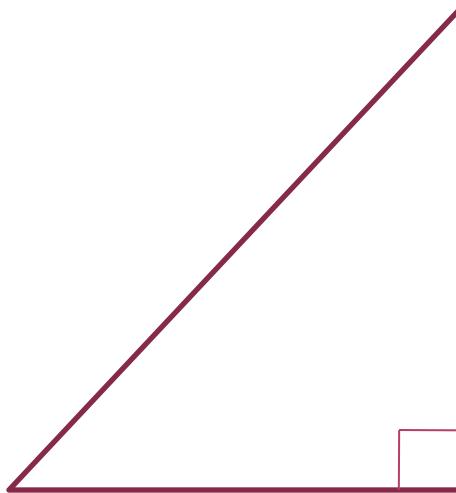
**Obtuse triangle**



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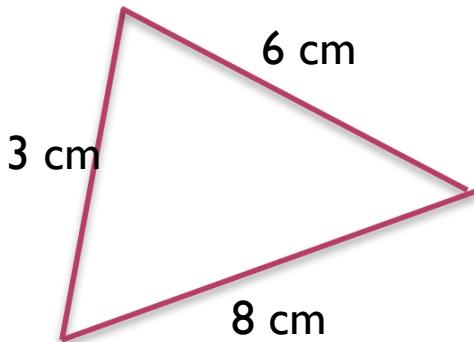
## EXERCISE- 15B

d.

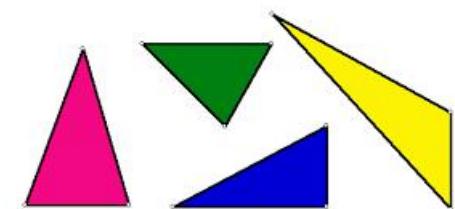


**Right triangle**

e.



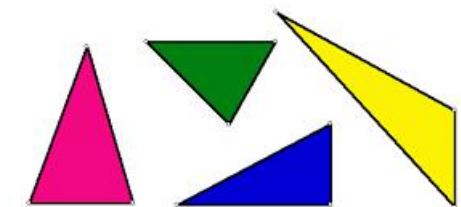
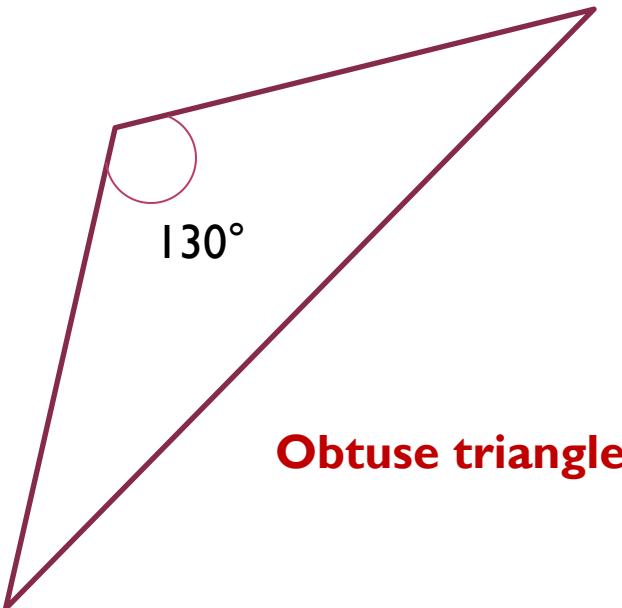
**Scalene triangle.**



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## EXERCISE- 15B

f.



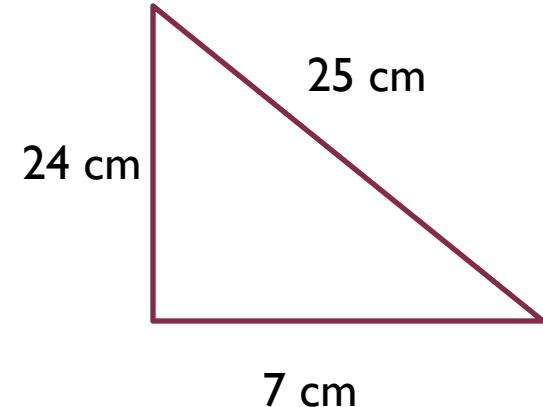
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## EXERCISE- 15B

### 2. Find the area.

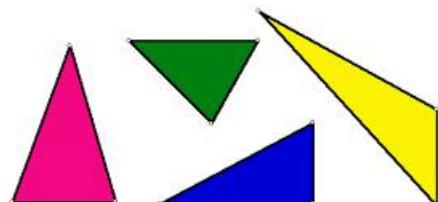
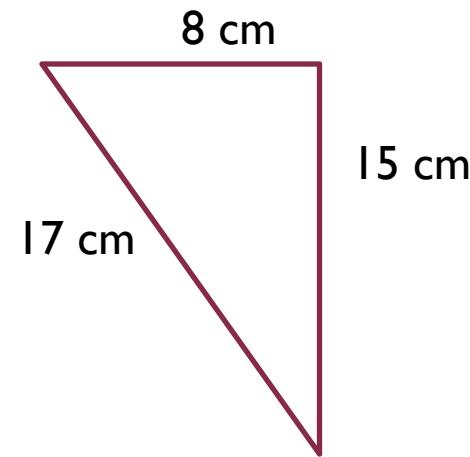
a. Area =  $\frac{1}{2} \times \text{base} \times \text{height}$

$$= \frac{1}{2} \times 7 \times 12 = 84 \text{ sq.cm}$$



b. Area =  $\frac{1}{2} \times \text{base} \times \text{height}$

$$= \frac{1}{2} \times 8 \times 15 = 60 \text{ sq.cm}$$

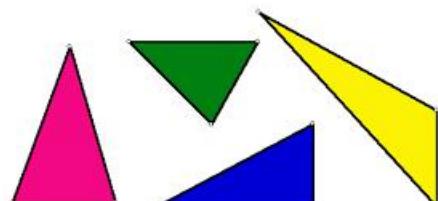
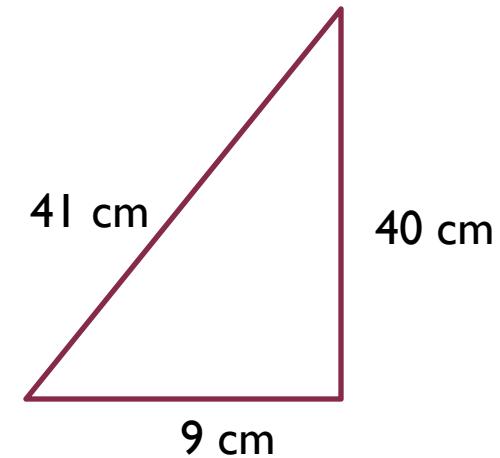


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## EXERCISE- 15B

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

$$= \frac{1}{2} \times 9 \times 20 = 180 \text{ sq.cm}$$



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# Learning Outcomes

## **Students are able:**

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

**THANKING YOU  
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