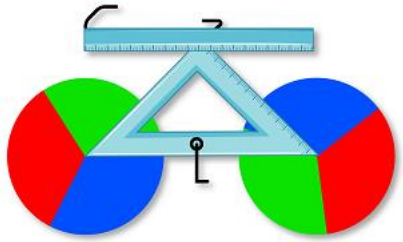
Class VII
CHAPTER 6_V1
TRIANGLE - PROPERTIES
EX 6.1, EX 6.2



MATHSGYM

maths is fun

06/02/2021

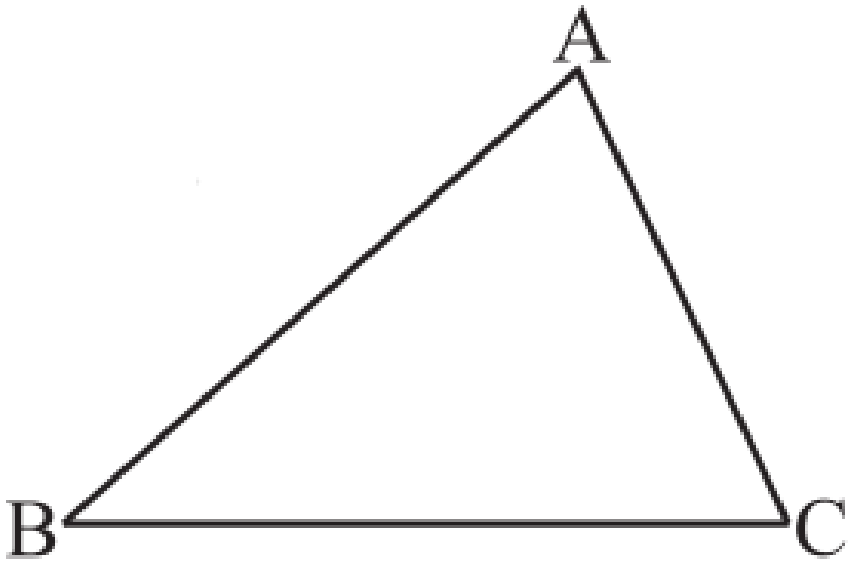
UK batch

TOPICS COVERED

- Introduction
- Types of triangles – (sides)
- Types of triangles – (angles)
- Medians of Triangles
- Altitude(height) of Triangles
- Exterior angle property
- Angle Sum Property

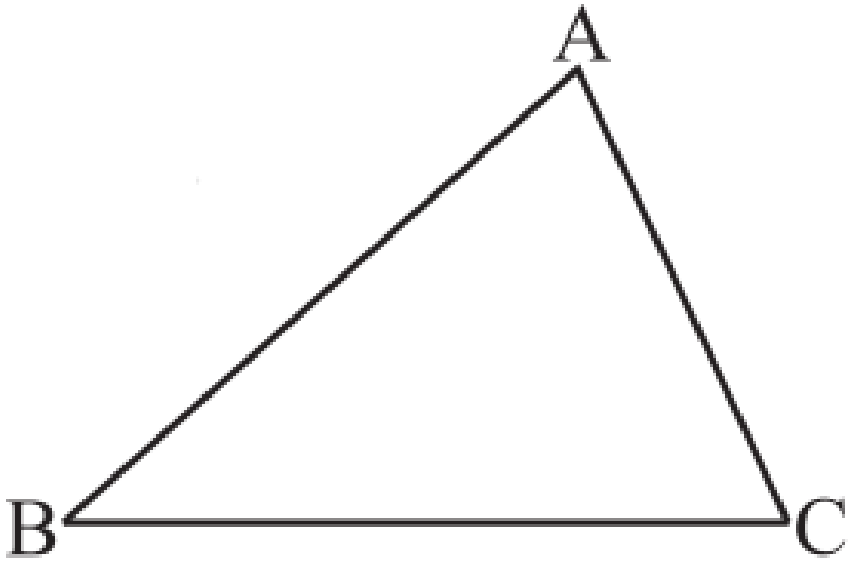
INTRODUCTION

- Sides:
- AB, BC , CA
- Angles:
- ∠BAC, ∠ABC, ∠BCA
- Vertices:
- A, B, C



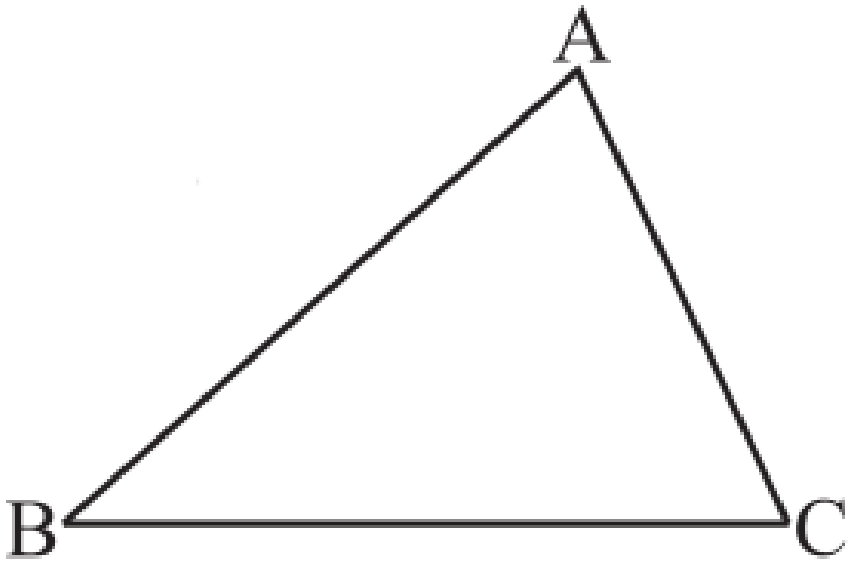
INTRODUCTION

- Name the side opposite to the vertex A
- BC
- Name the side opposite to the vertex B
- AC
- Name the side opposite to the vertex C
- AB



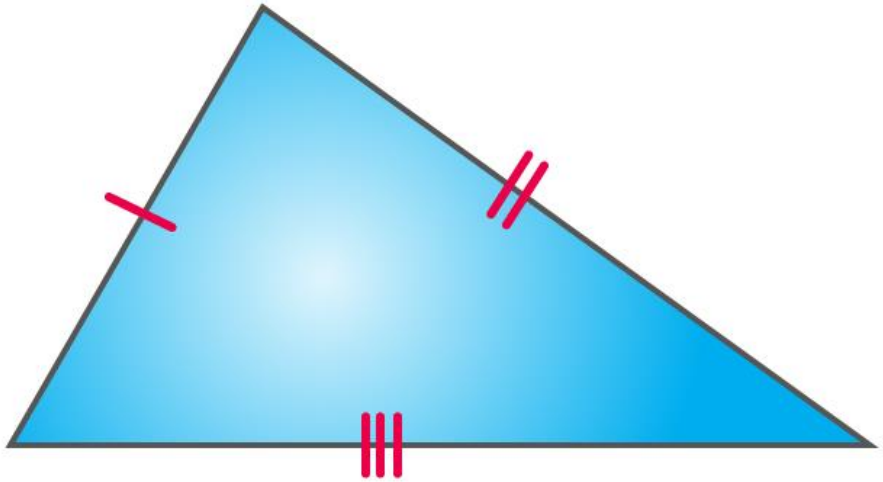
INTRODUCTION

- Name the angle opposite to side AB
- ∠C
- Name the angle opposite to side BC
- ∠A
- Name the angle opposite to side CA
- ∠B



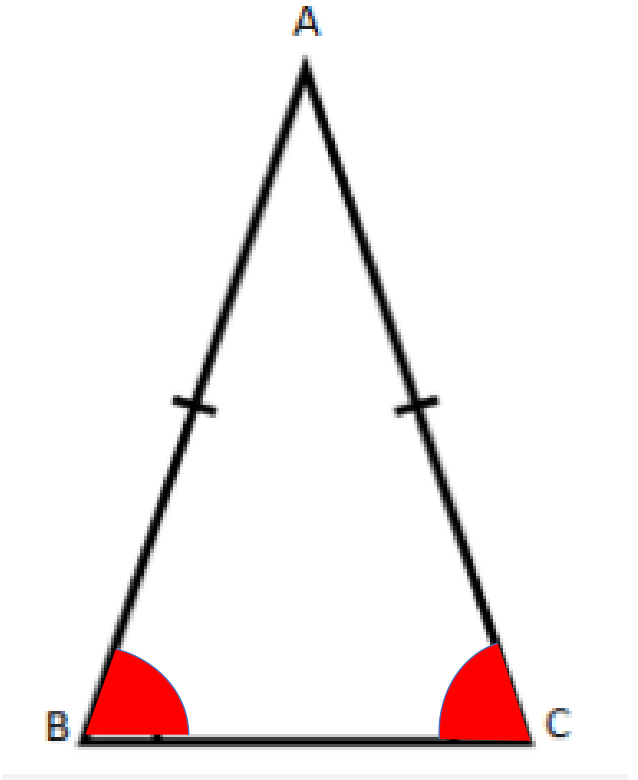
TYPES OF TRIANGLES – BASED ON SIDES

- Scalene,



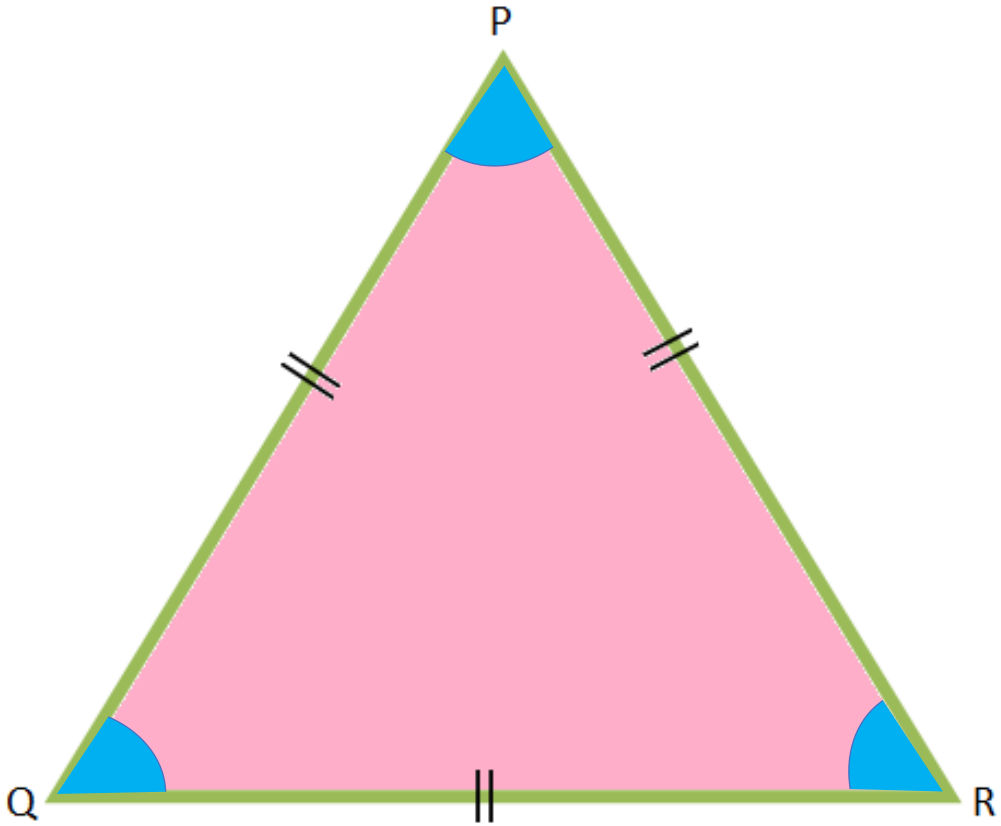
TYPES OF TRIANGLES – BASED ON SIDES

- Isosceles



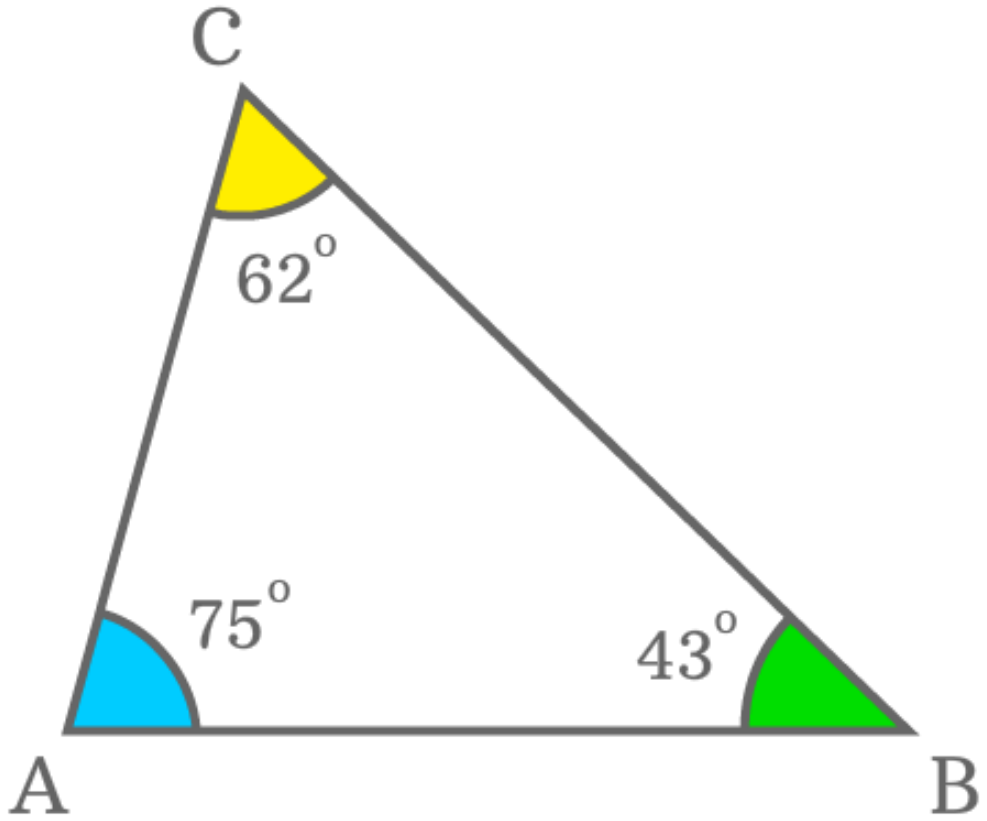
TYPES OF TRIANGLES – BASED ON SIDES

- Equilateral



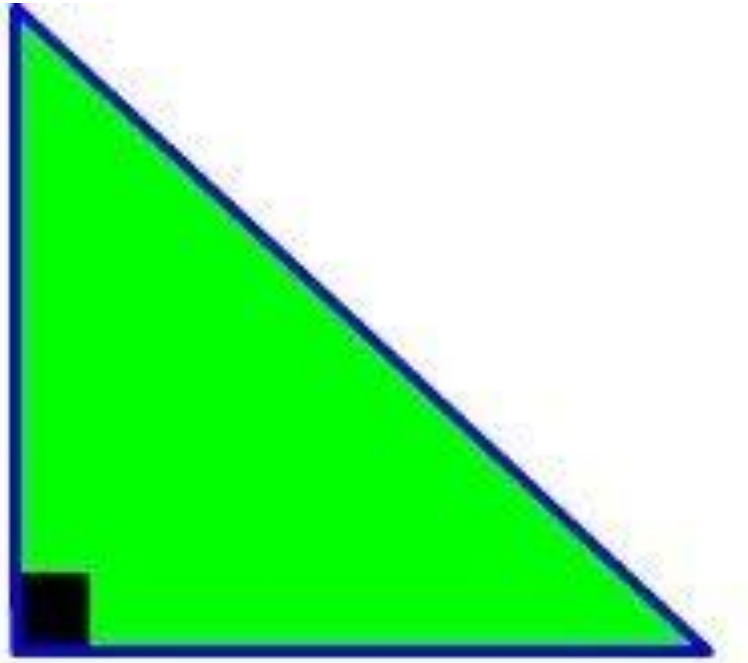
TYPES OF TRIANGLES – BASED ON ANGLES

- Acute Angled Triangle
- All the three angles are < 90^0



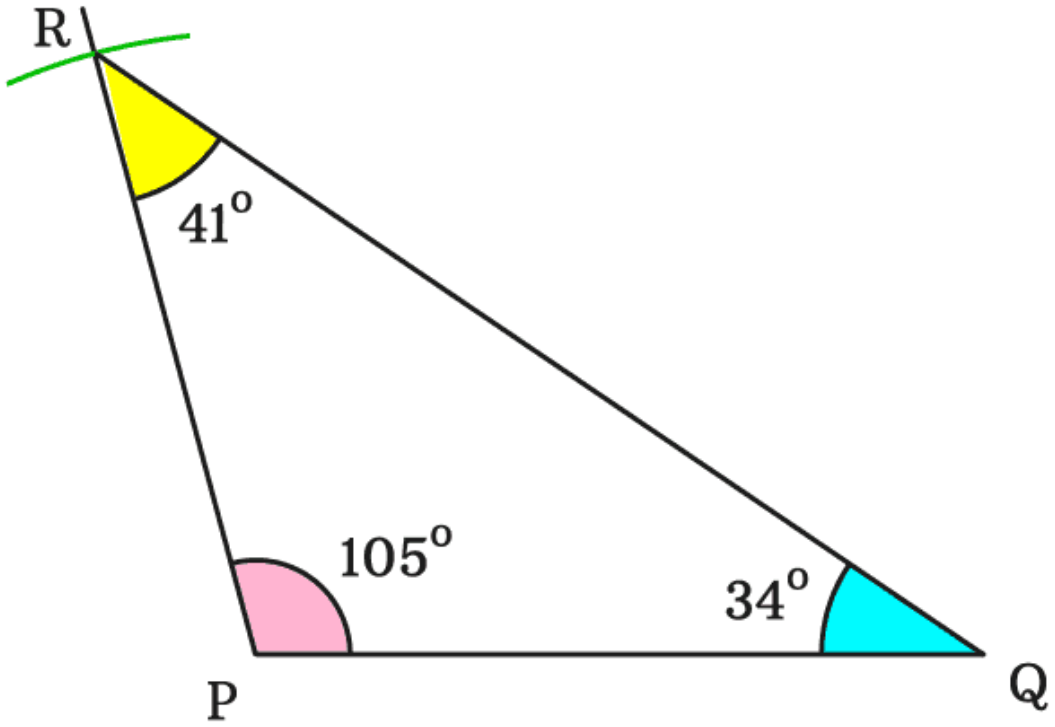
TYPES OF TRIANGLES – BASED ON ANGLES

- Right Angled Triangle
- One of the angle = 90^0



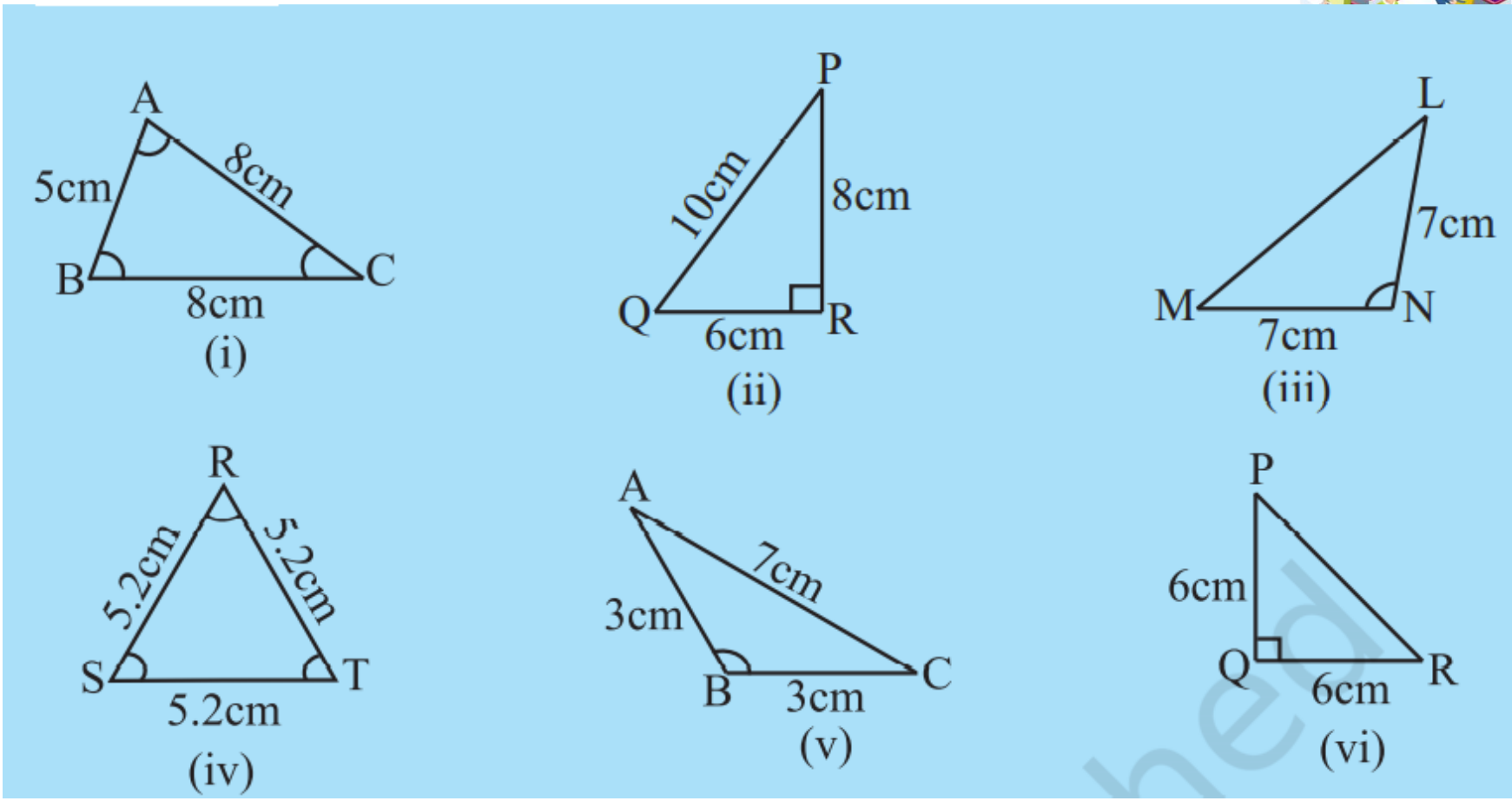
TYPES OF TRIANGLES – BASED ON ANGLES

- Obtuse Triangle
- One angle > 90^0



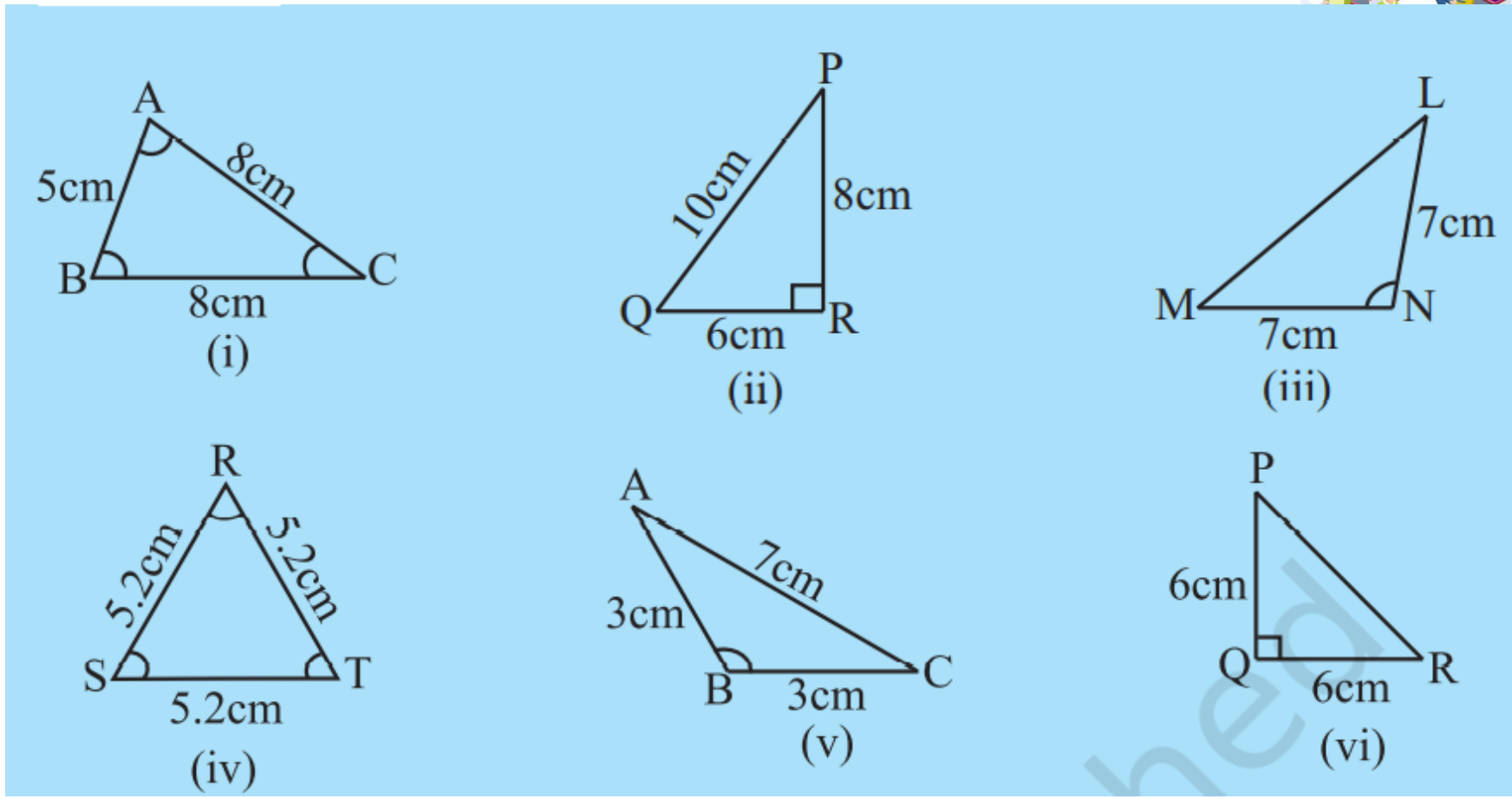
Assignment 61 (CW)
Classify the Triangles as per sides

i. Scalene
ii. Scalene
iii. Isosceles
iv. Equilateral
v. Isosceles
vi. Isosceles



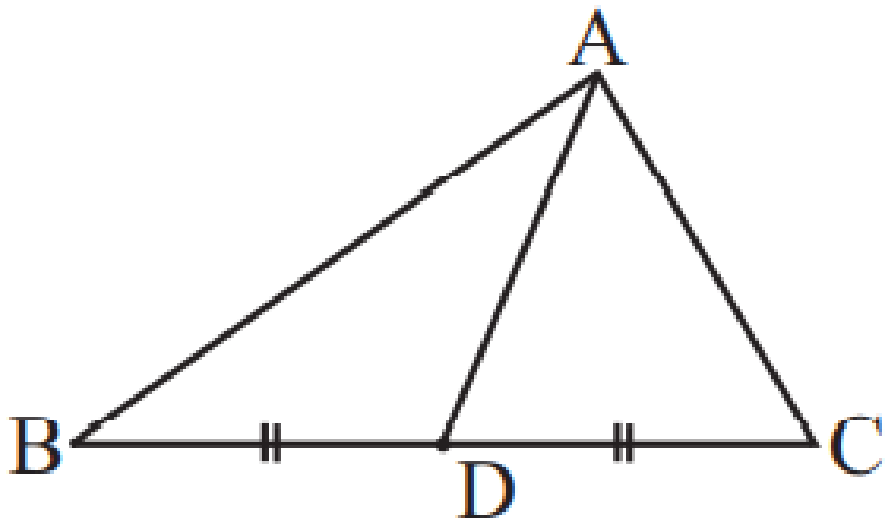
Assignment 61 (CW)
Classify the Triangles as per angles

i. Acute
ii. Right
iii. Obtuse
iv. Acute
v. Obtuse
vi. Right



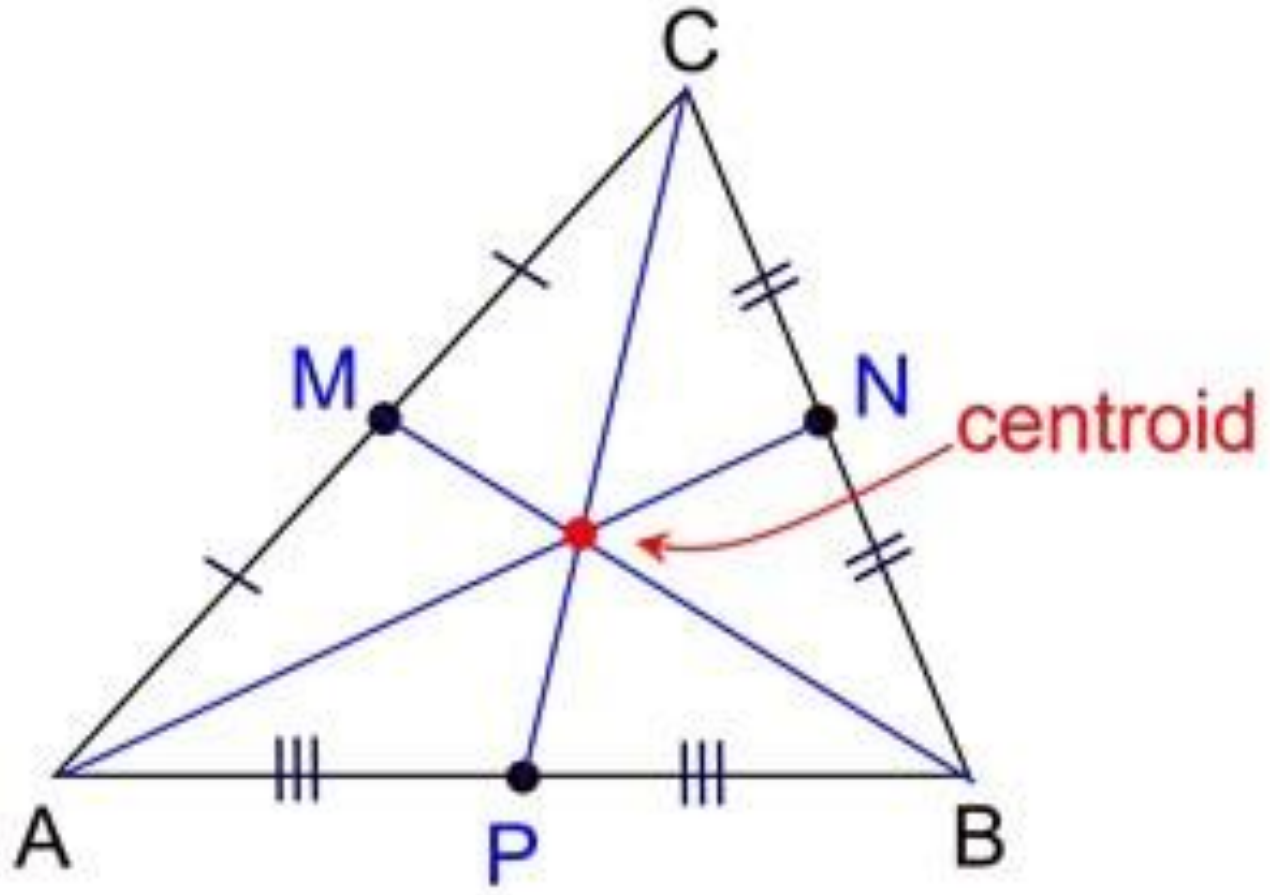
MEDIANS OF A TRIANGLE

- **A median** connects **a vertex** of a triangle to the **mid-point** of the opposite side.
- The line segment AD, joining the mid-point of BC to its opposite vertex A is called a median of the triangle.



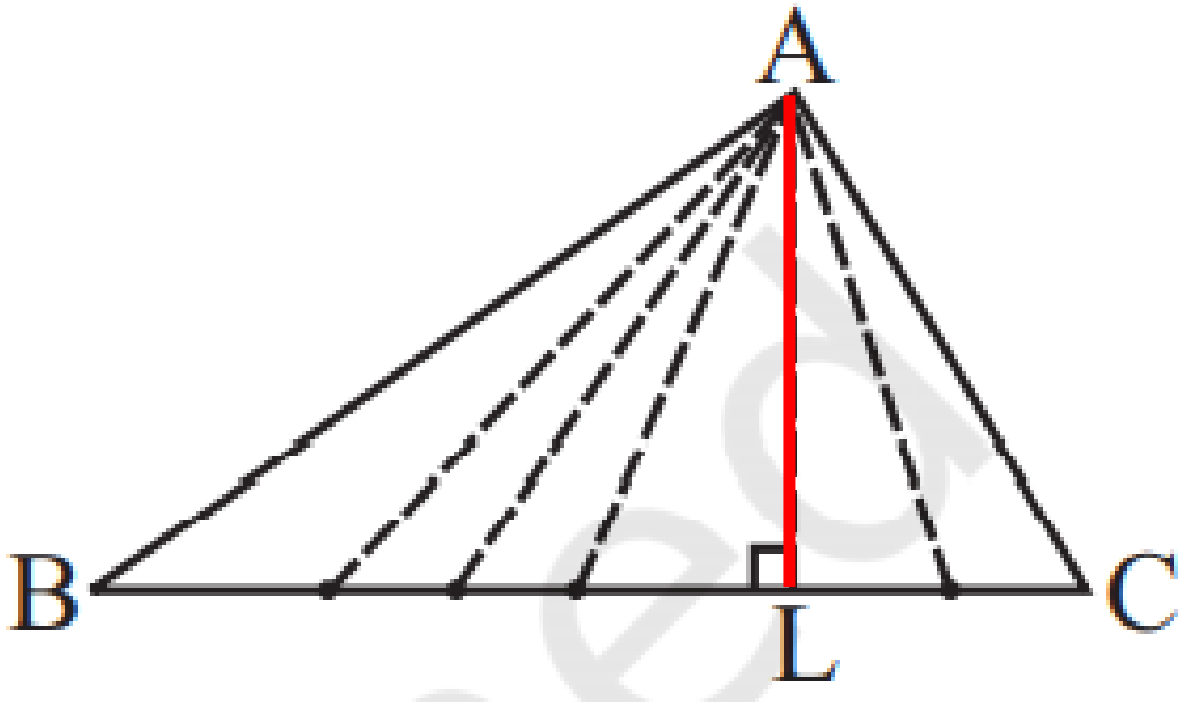
MEDIANS OF A TRIANGLE

- How many medians can a triangle have?
- 3



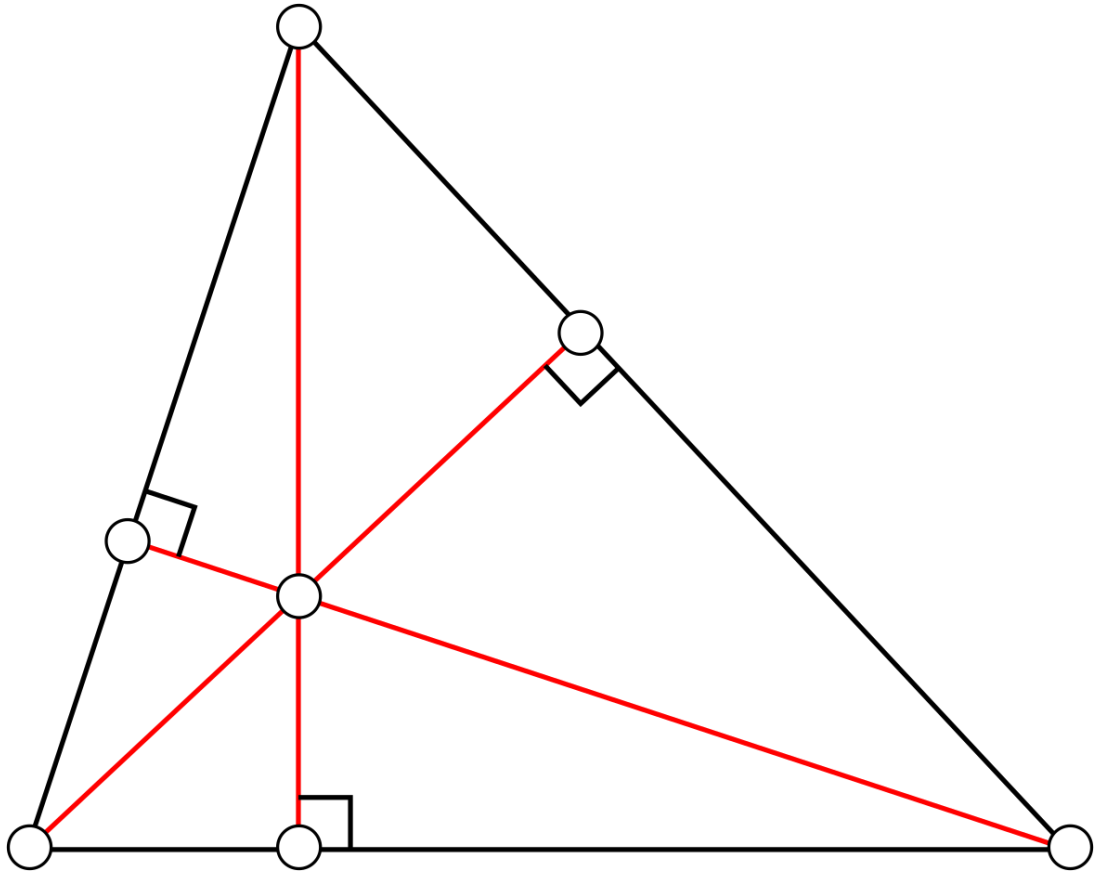
ALTITUDE (HEIGHT) OF A TRIANGLE

- The height is the distance from vertex A to the base BC .
- The height is given by the line segment that starts from A, comes straight down to BC, and is perpendicular to BC .
- This line segment AL is an altitude of the triangle.



ALTITUDE (HEIGHT) OF A TRIANGLE

- How many altitudes can a triangle have?
- 3



Assignment 61 (CW)
Ex 6.1

Q 1, Q 2, Q3