

**BCM SCHOOL, BASANT AVENUE, DUGRI ROAD, LUDHIANA**

**CLASS:-VII**

**SUBJECT :-MATHEMATICS (041)**

**Assignment**

**Ch-6: Triangle and its Properties**

**Session: 2023-24**

**MCQs**

Q1. In a right triangle, if hypotenuse is H, perpendicular is P and base is B then

- (a)  $B^2 = H^2 + P^2$     (b)  $H^2 = P^2 - B^2$   
(c)  $P^2 = B^2 + H^2$     (d)  $H^2 = P^2 + B^2$

Q2. The length of two sides of a triangle are 8 CM and 15 CM. Between which two numbers, will the length of the 3<sup>rd</sup> side fall?

- (a) 8-15cm    (b) 0-8cm  
(c) 7 -23 cm    (d) 15-23 cm

Q3. How many medians can a triangle have?

- (a) 1    (b) 2    (c) 3    (d) 6

**ASSERTION -REASONING**

**Assertion : In a right triangle, the longest side is hypotenuse**

**Reason: the side (hypotenuse) opposite to the largest angle will be the longest one.**

- a) Both assertion and reason are correct and reason is the correct explanation for assertion  
b) Both assertion and reason are correct but reason is not correct explanation for assertion  
c) assertion is correct but reason is false.  
d) Both assertion and reason are false.

**SUBJECTIVE QUESTIONS**

Q5. Find the angles of a triangle which are in ratio 2:3:4 .

Q6. The length of rectangle is 12 cm and its diagonal is 13 . Find its perimeter

Q7. Neha walks 12 m west and then 5 m North. How far is she away from her initial position?

**Q8. CASE STUDY**

Reena is very intelligent and curious girl. She wants to determine whether the given triangle in her book is right angled triangle or not. She measured all the sides of triangle which were 8cm, 15cm, 17cm. On the basis of above information, answer the following questions:

- A ) Name the theorem Reena will use to check whether the triangle is right angled or not.
- B) Which will be the length of hypotenuse in the above triangle and why?
- C) Show whether it is Right angled triangle or not.