Maths Worksheet of Chapter – 6 (Triangle and Its property)

Class - VII

Q-1. Fill in the blanks.

a)A triangle whose one angle is more than 90°is called ----------- .

b)A triangle whose all the sides are of different length is called -----------.

c) The sum of the lengths of the sides of a triangle is called its ----------.

d) The sum of the lengths of two sides of a triangle is always -----------than the third side.

e) An exterior angle and the adjacent interior angle form a -----------.

f)The sum of all the angles of a triangle is -----------.

g) In a right angled triangle the side opposite to the right angle is called -----------.

h) A triangle can not have more than one -------- angle.

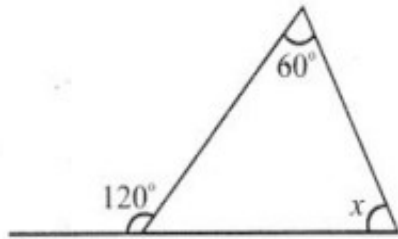**Q-2. Choose the correct option.**

(i) The hypotenuse of a right triangle is 17 cm long. If one of the remaining two sides is 8 cm in length, then the length of the other side is:

(a)15 cm
(b) 12 cm
(c) 13 cm
(d) none of these.

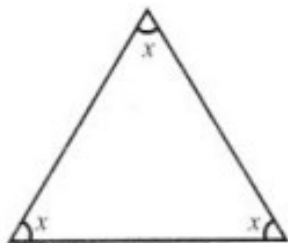**(ii).Which is the longest side in the triangle ABC right angled at B?**

(a) AB

(b) BC

(c) AC

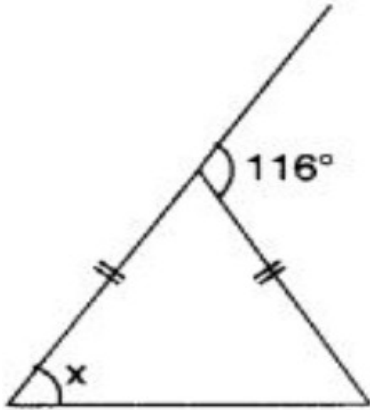(d) none of these.

(iii)Find the value'of x in given figure.

(a) 180°

(b) 55°

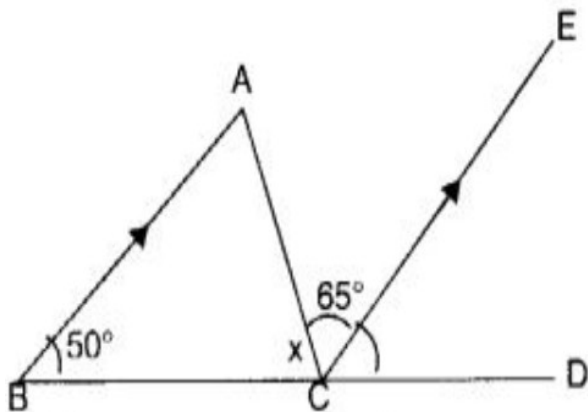(c) 90°

(d) 60°

(iv)Find the value'of x in given figure.

(a) 180°

(b) 55°

(c) 90°

(d) 60°

(v) The angle x in the following figure.

(a) 58°

(b) 59°

(c) 57°

(d) 56°

(vi)In the following figure, find x if BA || CE.

(a) 60°

(b) 40°

(c) 45°

(d) 65°

(vii). **In a ΔABC, which of the given condition holds?**

(a) AB−BC>C A

(b) AB+BC<CA

(c) AB−BC <CA

(d) AB + CA< BC

Short Answer Questions. (show calculations)

Q-2. Two angles of a triangle are of measures 75° and 35°. Find the measures of the third angle.

Q-3. Each of the two equal angles of a triangle is twice the third angle. Find the angles of the triangle.

Q-4.If the angles of a triangle are in the ratio 2:3:4, determine three angles.

Q-5. One of the acute angles of a right triangle is 58°. Find the other acute angle.

Q-6.Is it possible to have a triangle with the following sides?

a)4cm, 5 cm, 6cm

b) 2.5 cm, 3cm, 3.5cm

Q-7. Which of the following are the sides of a right angled triangle?

a)4 cm, 5cm, 6 cm

b)3cm, 4cm ,5 cm

c) 1.5, 2.5cm, 3.5cm

Long Answer questions.

8.If one angle of a triangle is 100o and the other two angles are in the ratio 2: 3. Find the angles.

9. In the following figure the sides BC, CA and BA of a △ABC have been produced to D, E and F respectively. If ∠ACD = 105o and ∠EAF = 45o; find all the angles of the △ABC.
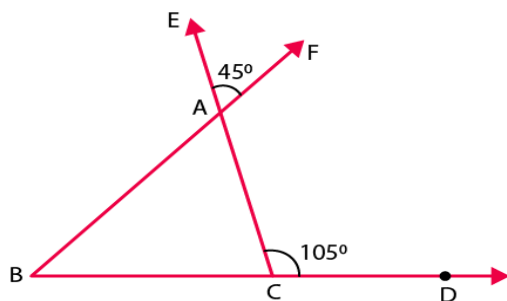

Fig. 37

10. A ladder 3.7 m long is placed against a wall in such a way that the foot of the ladder is 1.2 m away from the wall. Find the height of the wall to which the ladder reaches.

11. A man goes 15 m due west and then 8 m due north. How far is he from the starting point?

12. Find the perimeter of a rectangle with length 24 cm and diagonal 25cm.

	Class –VII MathsWorksheet Of Chapter 3 (Data Handling)
Q-1.	**Choose the correct option.** a)The ------ of a set of observations is the observation that occurs most often. i)mean ii) median iii) mode iv) range b)In a given data, arranged in ascending or descending order the --------- gives us the middle observation. i)mean ii) median iii) mode iv) range c) The difference between highest and lowest observation is called ---------. i) mean ii)median iii)mode iv) range d) A ------ ------- is a representation of numbers using bars of uniform width. i) pictograph ii) pie chart iii) bar graph iv) none of these e) To compare two collections of data we use -------- ----------.

i)Pictograph   ii) pie chart   iii) bar graph iv) double bar graph

Answer The Following Questions.(Short Answer Questions)

Q-2.   Write the relation between mean, median and mode.

Q-3.   Find the arithmetic mean of first 6 natural numbers.

Q-4.   If the mean of 6, 8, 5 and x is 7 , find the value of x.

Q-5.   Find the mean of first 10 even natural numbers.

Q-6.   Find the mean of first 5 multiples of 3.

Q-7.   Find the median of the following distribution,

22, 26, 25, 30, 32, 44, 36, 28, 30, 42, 40.

Also find the mode. Are they same?

Q-8.   The mean of 10,15, 19, 30, 43, 69 and x is x. Then find out the median.

Q-9.   Following figures relate the weekly wages (in Rs) of 15 workers in a factory:

300, 250, 200, 250, 200, 150, 350, 200, 250,200, 150,300,150,200,250

a)What is the range in wages (in Rs)?

b)How many workers are getting Rs 350?

c) How many workers are getting the minimum wages?

(Long Answer Questions)

Q-10. Following data gives total marks (out of 600) obtained by six children of a particular class.

Represent the data by a bar graph.

Students	Ajay	Bali	Dipti	Faiyaz	Gitika	Hari
Marks Obtained	450	500	300	360	400	540

Q-11. Four hundred students of Classes VI and VII were asked to name their favourite colours so as to decide upon what should be the colour of their school house. The results are shown in the following table.

| Colour:	Red	Green	Blue	Yellow	Orange
Number of Students of cl VI	43	19	55	49	34
Number of students of cl VII	49	34	43	55	19

Represent the given data on a Double bar graph.

(i) Which is the most preferred colour and which is the least for both the classes?

(ii) How many students are there in class VII?

Examine the graph below carefully and answer the following questions. The graph depicts the results of a school's students.

Q-12.

Result in a school
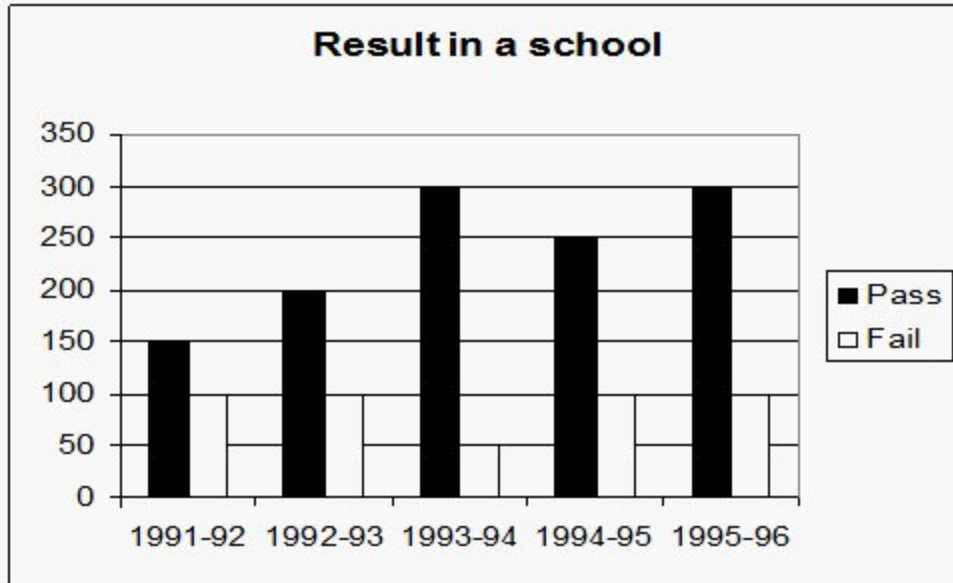
(a) Which year has the smallest difference between the number of kids who passed and those who failed?

(b) In the last five years, what was the average number of kids who failed in school?

(c) How many times have the same number of kids failed?