KHM HIGHER SECONDARY SCHOOL, VALAKKULAM
FIRST TERMINAL EVALUATION - 2021
MATHEMATICS

Time: 40 Minutes.   **STD: X.**   **Max.Marks: 20**

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1) The second term of an arithmetic sequence is 11 and common difference is 3
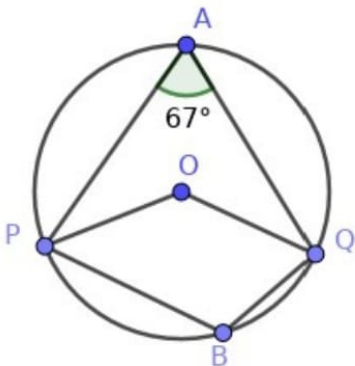
a) Write the sequence.

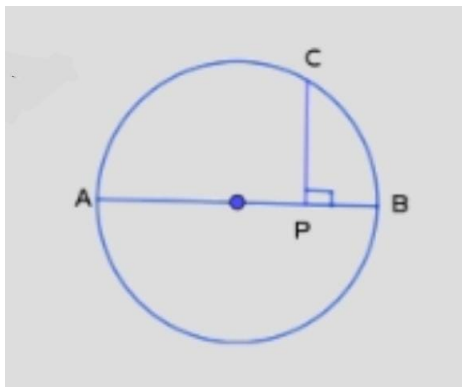b) What is the 12th term of the sequence ?   (2 Mark)

2) In the figure,O is the centre of the circle.<PAQ = 67°

a) Find <POQ.

b) Find <PBQ.   (2 mark)

3) In the figure AB is the diameter of the circle. AB = 15 cm, PB = 3 cm. Find PA and PC.   (2 mark)

4) Draw a circle of radius 3cm. Hence draw a triangle with two of its angles are 40°,55° and all the vertices are on the circle.   (3mark)

5) 4,9,14......is an arithmetic sequence.

a) Will the difference between any two terms of this sequence be 100?Why ?

b) Check whether 116 is a term of this sequence ?   (3mark)

6)Sum of the first 4 terms of an arithmetic sequence is 90. Sum of the 9 terms is also 90.

a) What is the 5th term of the sequence ?

b) Find the sum of the first five terms.

c) What is the 3rd term of the sequence.?

d) Find the common difference of the sequence.   (4 mark)

7) ABCD is a cyclic quadrilateral,AB is the diameter of the circle,AD = CD and <ADC = 130°.

a) What is the measure of <ACB ?

b) What is the measure of <ABC ?

c) Find <DCB ?

d) What is the measure of <BAD ?   (4 mark)