



# ST. LAWRENCE HIGH SCHOOL



A Christian Jesuit minority Institution

Subject: Mathematics

Class: X

Date:11/04/2020

Answer key of Worksheet-5

Chapter- Theorem related to angles in a circle

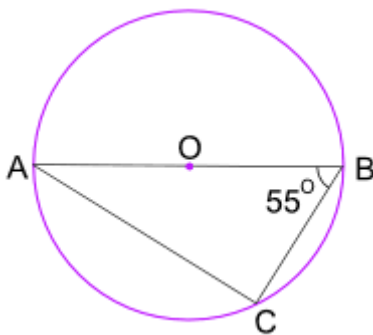
Topic- theorem on any angle in the semicircle is a right angle.

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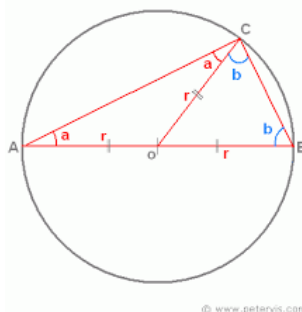
## Worksheet-5

1. Choose the correct alternative. 1x15=15

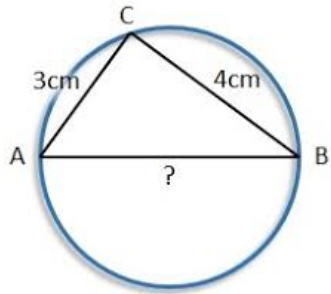
- a) Measure of any angle in the semicircle is   ans ii)  $90^\circ$   
b) In the following figure measure of angle BAC is   ans i)  $35^\circ$



c) If in the following figure angle BOC is  $70^\circ$ . Measure of a is   ans ii)  $35^\circ$



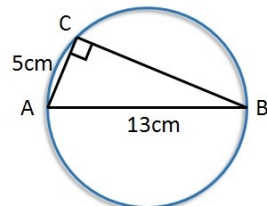
d) If in the following figure AB is the diameter, measure of AB is   ans iii) 5 cm



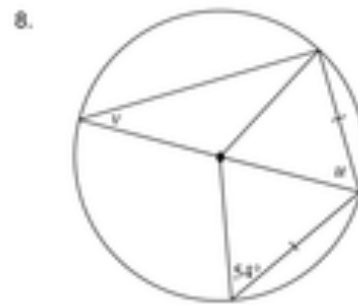
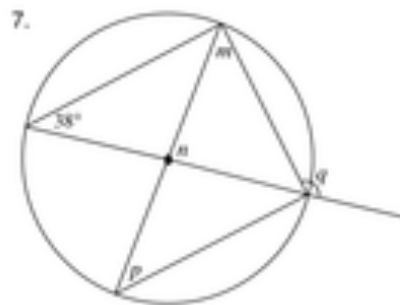
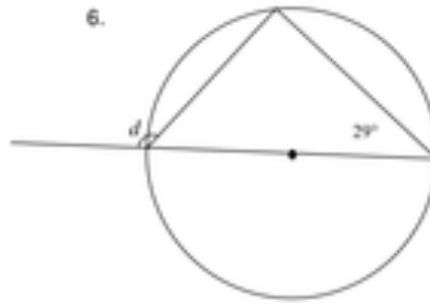
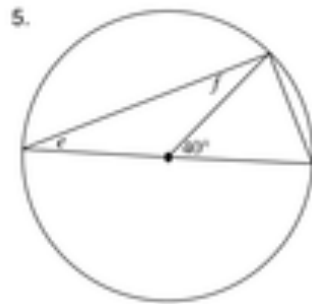
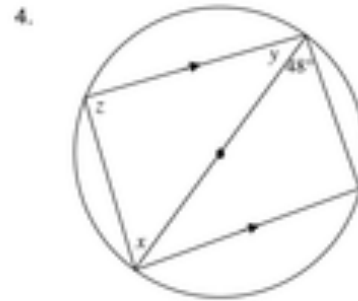
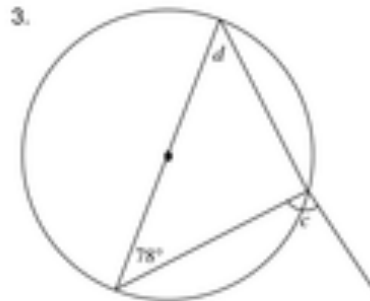
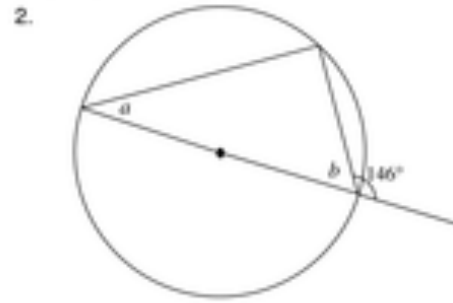
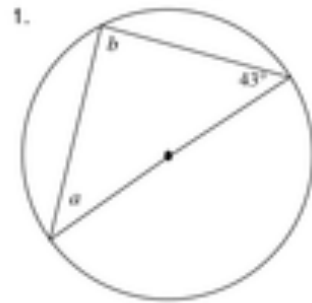
e) In  $\triangle ABC$  isosceles triangle  $AB=AC$ . now a circle is drawn keeping  $AB$  as the diameter, and the circle is intersecting  $BC$  at the point  $D$ .  $BD=4$  cm .Measure of  $CD$  is  
ans i) 4 cm

f) In a circle with centre  $O$ ,  $AOB$  is a diameter. A point  $C$  is taken on the circle . Angle  $OBC=60^\circ$ . Measure of angle  $OCA$  is ans ii)  $30^\circ$

g) In the following figure, length of  $BC$  is ans i) 12 cm



Now with reference to the follow figures choose the correct answer.



h) With reference to image 1, measure of a is    ans ii)  $47^\circ$

i)     With reference to image 2, measure of a is    ans i)  $56^\circ$

j) with reference to image 3, measure of d is    ans iii)  $12^\circ$

k) In the image 4 there is a parallelogram inside the circle, measure of y is

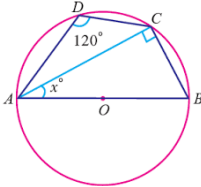
ans ii)  $42^\circ$

l)with reference to image 5 the given angle is  $64^\circ$ , measure of e is ans i)  $32^\circ$

m)In image 6 measure of d is ans ii)  $119^\circ$

n)In the image 7, measure of external angle q is ans i)  $128^\circ$

o)In the following figure angles ABC and ADC are supplementary .Measure of x is  
ans ii)  $30^\circ$



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