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ST. LAWRENCE HIGH SCHOOL
A Christian Jesuit minority Institution
Subject: Mathematics

Class: X
Date:11/04/2020
Worksheet-5

Chapter- Theorem related to angles in a circle
Topic- theorem on any angle in the semicircle is a right angle.

Worksheet-5

1. Choose the correct alternative.
a) Measure of any angle in the semicircle is i) $45^{\circ}$ ii) $90^{\circ}$ iii) $60^{\circ}$ iv) none of these b)In the following figure measure of angle BAC is i) $\left.35^{\circ} \mathrm{ii)} 55^{\circ} \mathrm{iii}\right) 45^{\circ} \mathrm{iv}$ ) none of these

c)If in the following figure angle BOC is $70^{\circ}$. Measure of a is i$\left.\left.) 30^{\circ} \mathrm{ii}\right) 35^{\circ} \mathrm{iii}\right) 55^{\circ} \mathrm{iv}$ ) none of these

d) If in the following figure $A B$ is the diameter, measure of $A B$ is $i) \mathbf{6 ~ c m . i i ) ~} \mathbf{1 0} \mathbf{~ c m ~ i i i ) ~}$ 5 cm iv) none of these

e) In ABC isosceles triangle $A B=A C$.now a circle is drawn keeping $A B$ as the diameter, and the circle is intersecting $B C$ at the point $D . B D=4 \mathbf{c m}$.Measure of $C D$ is i) $\mathbf{4 \mathrm { cm }}$ ii) $\mathbf{3 \mathrm { cm }} \mathrm{iii} \mathbf{5 ~ c m ~ i v ) ~ n o n e ~ o f ~ t h e s e ~}$
$f$ In a circle with centre $0, A O B$ is a diameter. $A$ point $C$ is taken on the circle. Angle $O B C=60^{\circ}$. Measure of angle OCA is i) $60^{\circ} \mathrm{ii)} 30^{\circ} \mathrm{iii} 90^{\circ} \mathrm{iv}$ ) none of these g) In the following figure,length of $B C$ is $i) 12 \mathrm{~cm}$ ii) 10 cm iii) $\mathbf{6 ~ c m ~ i v ) ~ n o n e ~ o f ~ t h e s e ~}$


Nowwith reference to the follow figures choose the correct answer.

h)With referece to image 1 , measure of a is i) $43^{\circ}$ ii) $47^{\circ}$ iii) $57^{\circ} \mathrm{iv}$ ) none of these
i) With reference to image 2 , measure of a is i) $56^{\circ}$ ii) $46^{\circ}$ iii) $76^{\circ}$ iv) none of these
j) with referece to image 3 ,measure of $d$ is $\left.\left.\mathrm{i}^{\prime} 15^{\circ} \mathrm{ii}\right) 22^{\circ} \mathrm{iii}\right) 12^{\circ} \mathrm{iv}$ ) none of these
k)In the image 4 there is a parallelogram inside the circle, measure of $y$ is $i) 48^{\circ}$ ii) $42^{\circ}$ iii) $52^{\circ} \mathrm{iV}$ ) none of these

1) with reference to image 5 the given angle is $64^{\circ}$, measure of $e$ is i) $32^{\circ}$ ii) $42^{\circ}$
iii) $52^{\circ}$ iv) none of these
m)In image 6 measure of $d$ is i) $109^{\circ}$ ii) $119^{\circ}$ iii) $129^{\circ}$ iv) none of these
n)In the image 7 , measure of external angle $q$ is i) $\left.\left.128^{\circ} \mathrm{ii}\right) 138^{\circ} \mathrm{iii}\right) 118^{\circ} \mathrm{iv}$ ) none of these
o)In the following figure angles ABC and ADC are supplementary .Measure of $x$ is $i$ ) $60^{\circ}$ ii) $30^{\circ}$ iii) $50^{\circ}$ iv) $90^{\circ}$

