

8.3

Lesson 8.3 (1)

Math 9

May 30, 2013

Properties of Angles in a Circle

May 27, 2019

Mini Lesson #3:

TASK 1, 2 and 3

A soccer player attempts to get a goal. In a warm-up, players line up parallel to the goal line to shoot on the net. Does each player have the same shooting angle? Is there an arrangement that allows the players to be spread out but still have the same shooting angle?

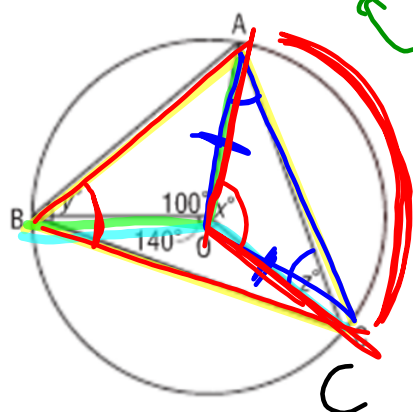
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Example 3 Determining Angles in an Inscribed Triangle

Triangle ABC is inscribed in a circle, centre O.

$\angle AOB = 100^\circ$ and $\angle COB = 140^\circ$

Determine the values of x° , y° , and z° .



$\angle ABC$

$$\begin{array}{r} 100 \\ 140 \\ \hline 240 \end{array} - 1$$

$$x^\circ = 360 - 240 = 120^\circ$$

$$y^\circ = \frac{1}{2} \text{ of } 120 = 60^\circ$$

$$\begin{array}{r} 180 \\ 120 \\ \hline 60 \end{array} \div 2 = 30^\circ$$

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