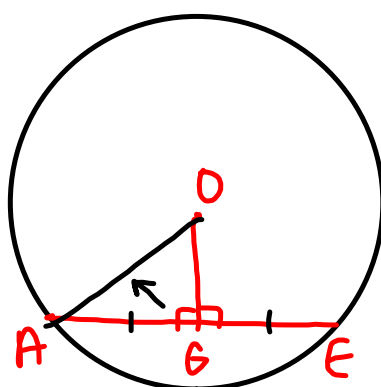
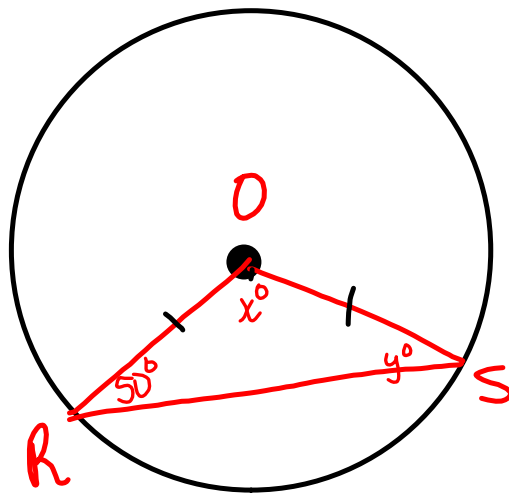


Warm-Up

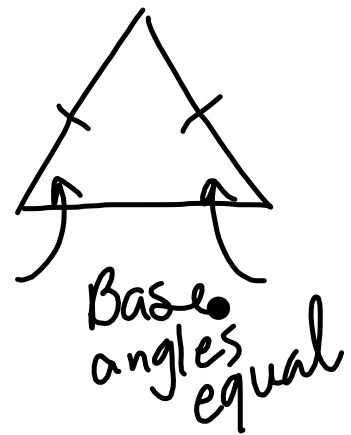
May 22, 2018



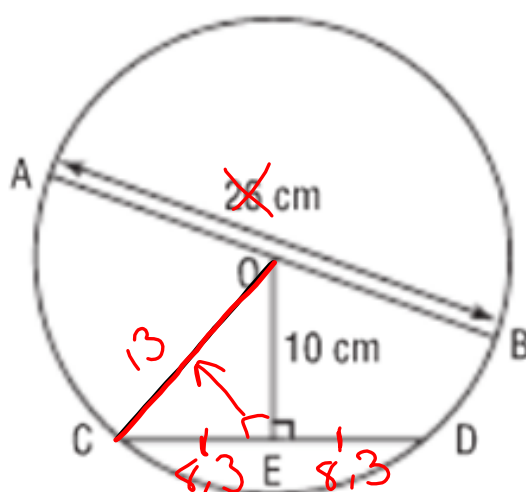
1. Draw a chord label **AE**
2. Draw a perpendicular line from the center to the chord. Label OG $[90^\circ]$
3. Draw a radius **OA** *



$$\begin{array}{r}
 \angle ORS = 50^\circ \\
 \angle ROS = 80^\circ \\
 \angle OSR = 50^\circ \\
 \hline
 180^\circ
 \end{array}$$



Find the length
of CD. [chord]



$$a^2 = c^2 - b^2$$

$$a^2 = 13^2 - 10^2$$

$$a^2 = 169 - 100$$

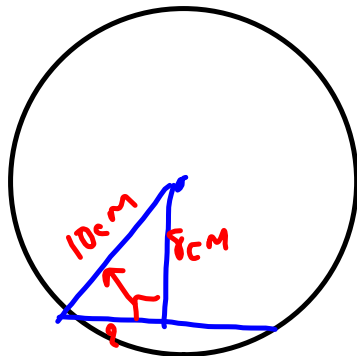
$$\sqrt{a^2} = \sqrt{69}$$

$$a = 8.3$$

$$CD \rightarrow 16.6 \text{ cm}$$

A circle has a diameter ~~radius~~ of ~~20~~¹⁰ cm.

The distance from the center to the chord is 8 cm. Find the length of the chord. You MUST INCLUDE A DIAGRAM!!!



$$a^2 = c^2 - b^2$$

$$a^2 = 10^2 - 8^2$$

$$a^2 = 100 - 64$$

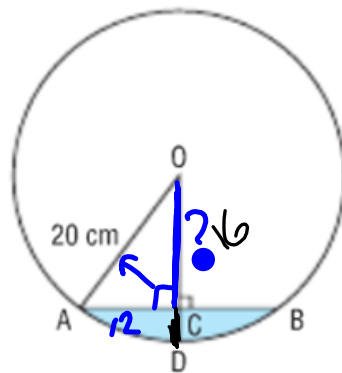
$$\sqrt{a^2} = \sqrt{36}$$

$$a = 6$$

Chord
12cm

The radius of the pipe below is 20 cm. Water fills less than one-half of the pipe. The surface of the water AB is 24 cm wide.

Determine the maximum depth of the water, which is the depth CD.



$$CD = 4 \text{ cm}$$

$$a^2 = c^2 - b^2$$

$$a^2 = 20^2 - 12^2$$

$$a^2 = 400 - 144$$

$$\sqrt{a^2} = \sqrt{256}$$

$$a = 16$$

Homework

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Answers

Use 3 Letters to Name an Angle!

the 20



4. Point O is the centre of each circle.
 Determine each value of x° and y° .

