

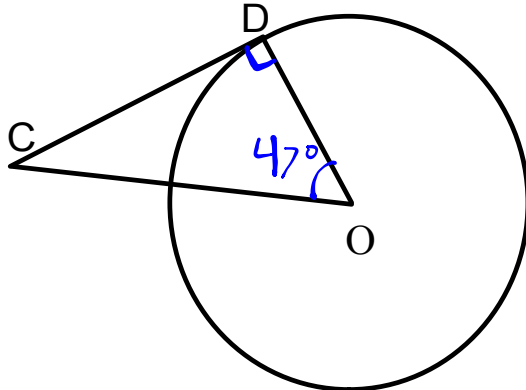
# Section 8.7

## Warm Up

May 11, 2017

- 1) Point O is the centre of a circle and CD is a Tangent to the circle. In  $\triangle OCD$ ,  $\angle COD = 47^\circ$ . Determine the measure of  $\angle OCD$ .

SHOW ALL WORK AND COPY THIS DOWN



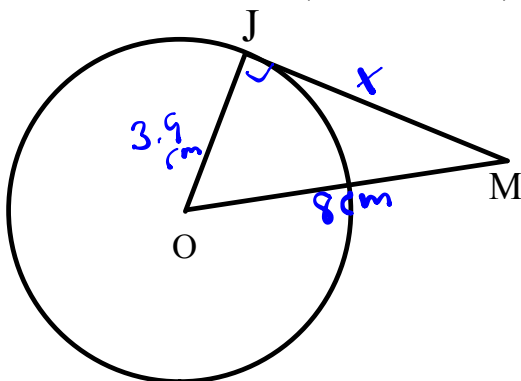
$$\begin{aligned}\angle OCD &= 180 - 90 - 47 \\ &= 43^\circ\end{aligned}$$

## DAY 2

# Using the Pythagorean Theorem in a Circle

- 2) Point O is the center of a circle and JM is a tangent to the circle. The radius 3.9 cm and  $OM = 8$  cm. Determine the length of the tangent line. Give the answer to the nearest tenth.

(Show all Work)



$$\begin{aligned}a^2 &= c^2 - b^2 \\ x^2 &= 8^2 - 3.9^2 \\ &= 64 - 15.21 \\ &= 48.79 \\ x &= \sqrt{48.79} \\ &= 6.98 \text{ cm}\end{aligned}$$

Remember:

$$a^2 + b^2 = c^2$$

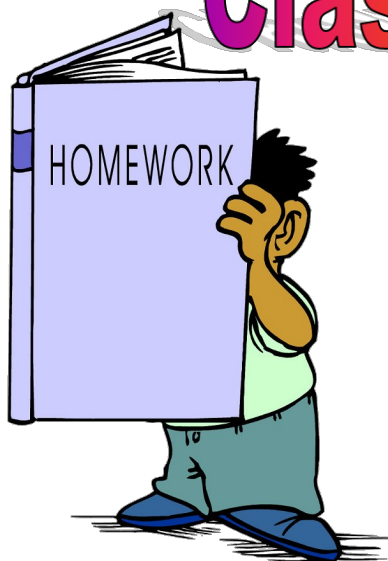
$$c = \sqrt{a^2 + b^2}$$

or

$$a = \sqrt{c^2 - b^2}$$



# Class/Homework



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Day 1

3 ab

4a

5abc

6abc

7ab

8

Day 2

9

12

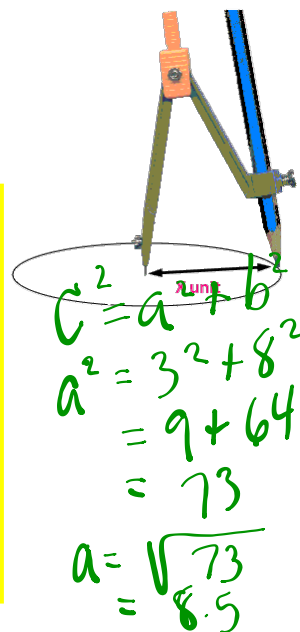
13

14

16c

17

18



Section 8.1 Sticky Note Activity.docx