Wrap Up to Tangents

Only two ways to solve Tangent Problems:

1) Angle sum of a triangle

    $180° - 90° -$ given angle = unknown angle

2) Pythagorean Theorem

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

    $a = \sqrt{c^2 - b^2}$ Leg
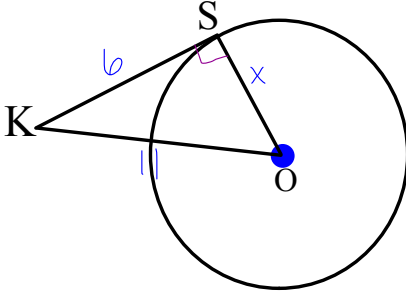
May 4-7:50 AM

Section 8.1 Warm Up

SK is a tangent determine the length of SO if given the following:
KO is 11cm and KS is 6 cm

SHOW ALL WORK AND COPY THIS DOWN

$\angle KSO = 90°$ (Tang P)
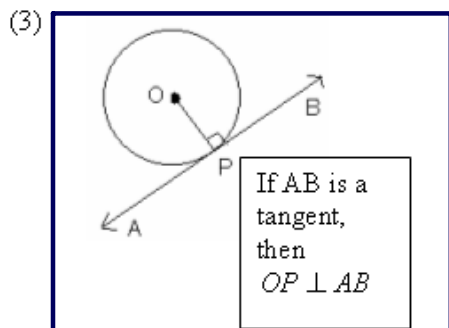
$a^2 = c^2 - b^2$

$a^2 = 11^2 - 6^2$
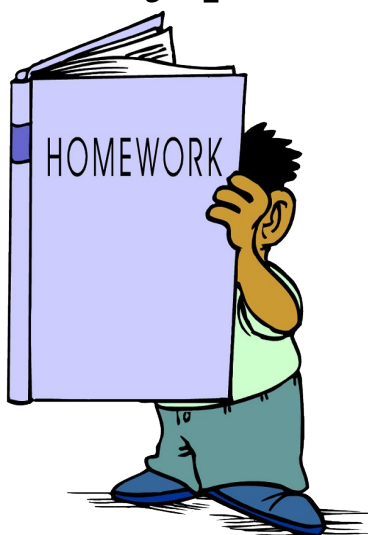
$a^2 = 121 - 36$

$\sqrt{a^2} = \sqrt{85}$

$a = 9.2$ cm

Apr 25-9:16 PM

Tangent Property:

A tangent to a circle is perpendicular to the radius at the point of tangency. $\angle APO = \angle BPO = 90°$

(3)

If AB is a tangent, then $OP \perp AB$

Apr 25-8:10 AM

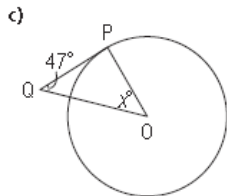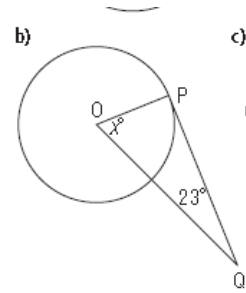# Any questions from the homework????
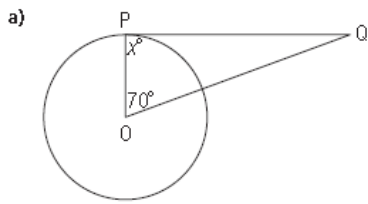

HOMEWORK

Page 388-390
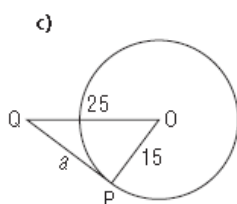
Day 1

   3 ab
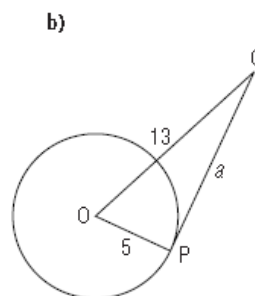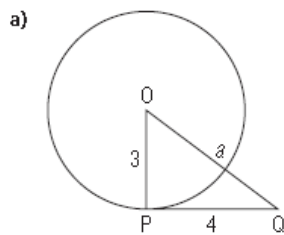   4a
   5abc sketch
   6abc sketch
   7ab sketch

Apr 25-8:06 AM

5. Point P is a point of tangency and O is the centre of each circle. Determine each value of $x°$.
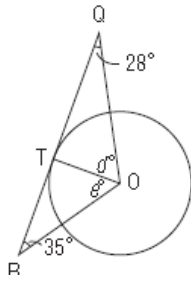
a)

b)

c)

c)

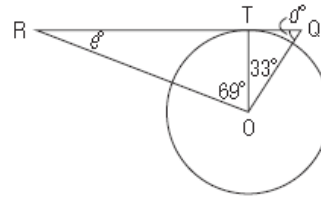**6.** Point P is a point of tangency and O is the centre of each circle. Determine each value of a.

a)

b)

c)

7. Point T is a point of tangency and O is the centre of each circle. Determine each value of $d°$ and $e°$.
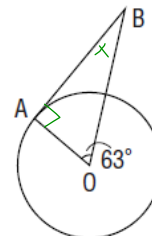
a)

b)

Apr 25-8:34 AM

Solving Problems Using the Tangent and Radius Property

Presenting...

Point O is the centre of a circle and AB is a tangent to the circle.
In $\triangle OAB$, $\angle AOB = 63°$
Determine the measure of $\angle OBA$.

▶ **A Solution**

$\angle BAO = 90°$ (Tang P)

$\angle OBA = 180 - 90 - 63$
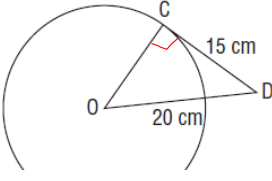
$= 27°$

Apr 25-10:16 PM

Solving Problems Using the Tangent and Radius Property

Presenting...

Point O is the centre of a circle
and CD is a tangent to the circle.
CD = 15 cm and OD = 20 cm
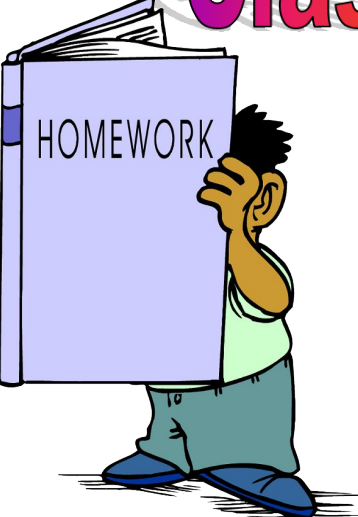Determine the length of the radius OC.
Give the answer to the nearest tenth.

C
15 cm
O
20 cm
D

$\angle OCD = 90°$ (Tang P)

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

$a^2 = 20^2 - 15^2$

$a^2 = 400 - 225$
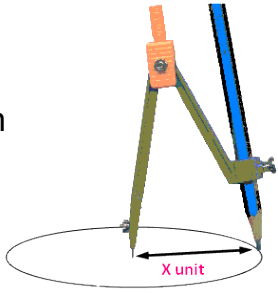
$\sqrt{a^2} = \sqrt{175}$

$a = 13.2$ cm

Apr 25-10:16 PM

Class/Homework

Page 388-390

Please provide sketches for each

HOMEWORK

X unit

7ab
8
9
13
14
16 c
17
20 (try)

Apr 25-10:42 PM

Attachments

Section 8.1 Sticky Note Activity.docx