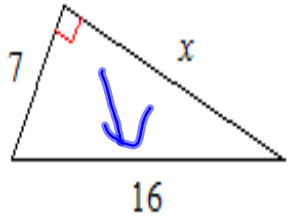
Warm-Up May 2, 2011

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

Solve for x:

1)



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

$a^2 = 16^2 - 7^2$

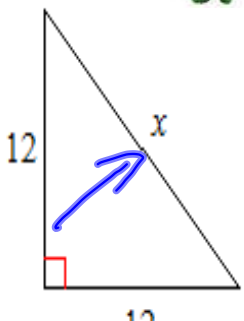
$a^2 = 256 - 49$

$a^2 = 207$

$a = 14.38$

$a = 14.4$

2)



$x^2 = a^2 + b^2$

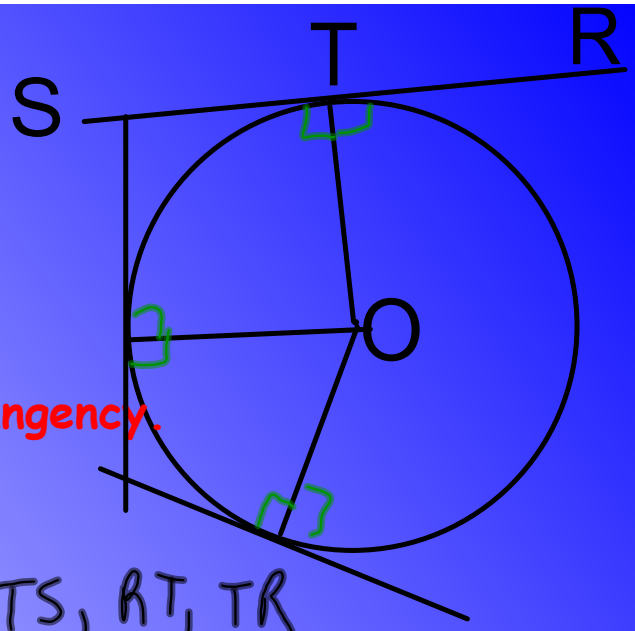
$x^2 = 12^2 + 12^2$

$x^2 = 144 + 144$

$x^2 = 288$

$x = 16.98$

$x = 17.0$



1. Identify the radius.

OT, TO

2. Identify the point of tangency.

T

3. Name the tangent

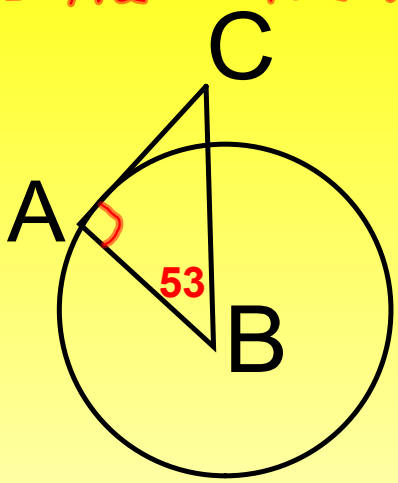
SR, RS, ST, TS, RT, TR

4. What is the relationship between the tangent and the radius?

They form a 90° angle/right angle

A. a) Find the value of <ABC 53°

b) Find the value of <ACB 37°



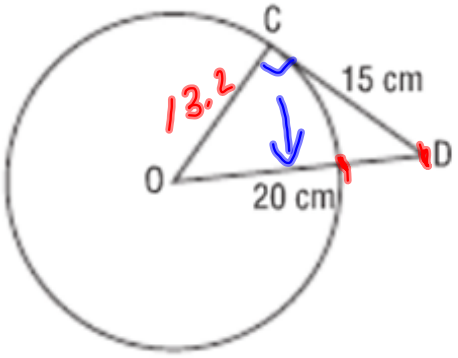
B. Identify the tangent AC, CA

Point O is the center of a circle and CD is a tangent to the circle.

CD= 15 OD=20

Determine the length of OC to the nearest tenth.

CO



$x^2 = c^2 - b^2$

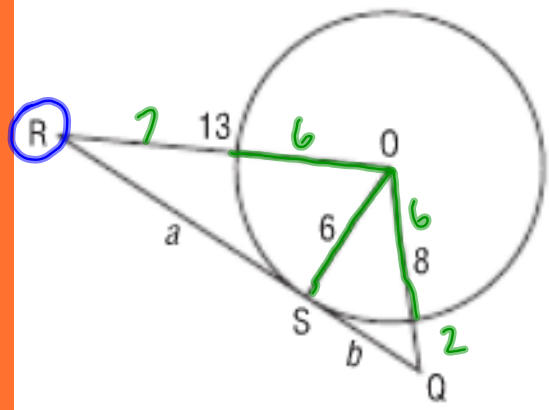
$x^2 = 20^2 - 15^2$

$x^2 = 400 - 225$

$x^2 = 175$

$x = 13.2$ cm

Point S is a point of tangency and O is the centre of the circle. Determine the values of a and b to the nearest tenth.



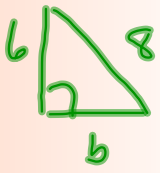
$a^2 = c^2 - b^2$

$a^2 = 13^2 - 6^2$

$a^2 = 169 - 36$

$a^2 = 133$

$a = 11.5$



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

$b^2 = 8^2 - 6^2$

$b^2 = 64 - 36$

$b^2 = 28$

$b = 5.3$

Homework

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3, 4, 5*, 6, 7,*

8,12,14,17,18*

test signed *sketch