Name _____ Hour _____
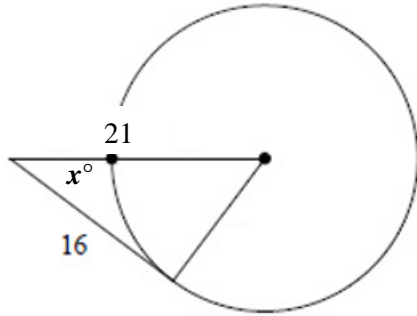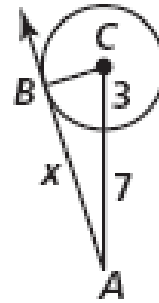
Unit 6 – Tangent Lines

Assume lines that appear tangent are tangent. Find the value of x.
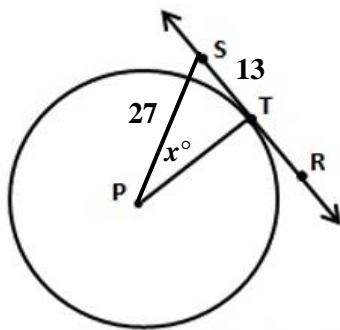
1.

21

$x°$

16

2.

C

B 3

x 7

A

3.

S 13

T

27

$x°$

R

P

4.

S

C

72°

34

x

T

U

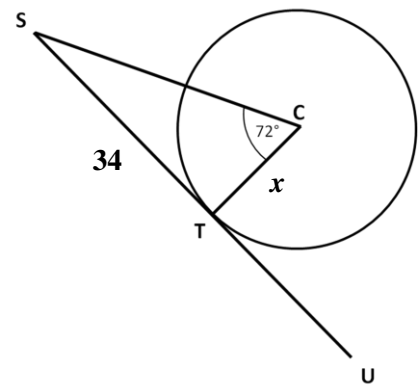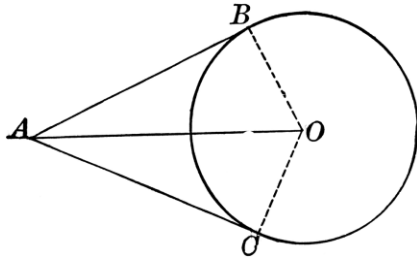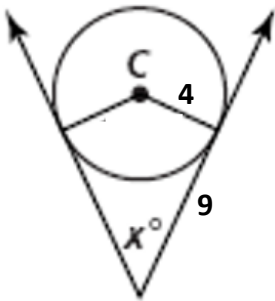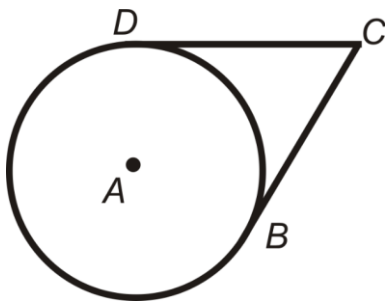**5.** $\overline{AB}$ and $\overline{AC}$ are tangents. If $AB = 25$ and $OB = 17$, find AO rounded to the nearest tenth.
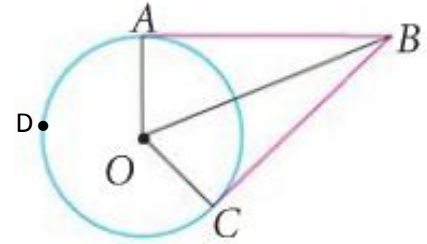

6. Find x

7. $\overline{CD}$ and $\overline{CB}$ are tangents. If $AB = 27$ and $DC = 30$, find AC rounded to the nearest tenth.

8. Lines $\overleftrightarrow{AB}$ and $\overleftrightarrow{CB}$ are two different lines tangent to the circle at points A and C. If the radius is 5 cm and the point B is 13 cm from the center,

    a. find the length of a tangent

    b. find $m \angle \text{BAO}$

    c. find $m \angle \text{ABO}$

    d. find $m \angle \text{ABC}$

    e. find $m \angle \text{AOC}$