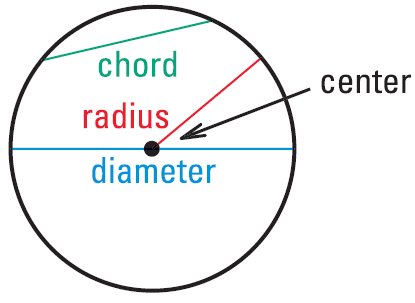
Geometry

10.1 Use Properties of Tangents



\_\_\_\_\_\_\_\_\_\_

Chord

# Circle

radius

center

\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_

point

distance

points

* All the \_\_\_\_\_\_\_\_\_ a given \_\_\_\_\_\_\_\_\_\_\_\_\_ from a central \_\_\_\_\_\_\_\_\_ in a plane

diameter

\_\_\_\_\_\_\_\_\_\_

center

* Named by the \_\_\_\_\_\_\_\_\_\_

edge

center

distance

r

Radius

\_\_\_\_\_\_\_\_\_\_ (\_\_\_) – the \_\_\_\_\_\_\_\_\_\_\_ from the \_\_\_\_\_\_\_\_\_\_ of the circle to the \_\_\_\_\_\_\_\_.

points

segment

Chord

\_\_\_\_\_\_\_\_\_\_– line \_\_\_\_\_\_\_\_\_\_\_\_ that connects two \_\_\_\_\_\_\_\_\_ on a circle.

center

chord

d

Diameter

\_\_\_\_\_\_\_\_\_\_ (\_\_\_) – \_\_\_\_\_\_\_\_\_ that goes through the \_\_\_\_\_\_\_\_\_\_ of the circle (longest chord = 2 radii)

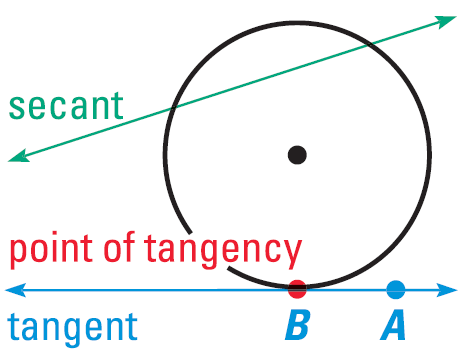
2r

d

* \_\_\_ = \_\_\_\_\_

What is the radius of a circle if the diameter is 16 feet?

= 8 feet

Secant

twice

intersects

secant

\_\_\_\_\_\_\_\_\_\_

* Line that \_\_\_\_\_\_\_\_\_\_\_\_\_\_ a circle \_\_\_\_\_\_\_\_\_

Tangent

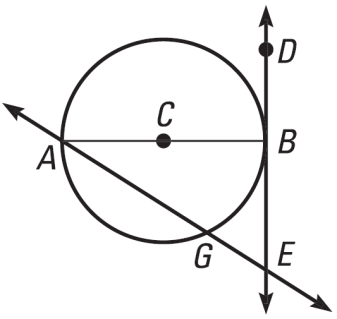
once

intersects

* Line that \_\_\_\_\_\_\_\_\_\_\_\_\_\_ a circle \_\_\_\_\_\_\_\_\_

tangent

\_\_\_\_\_\_\_\_\_\_

What word best describes ?

Chord

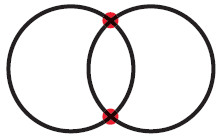
What word best describes ?

Radius

Name a tangent and a secant.

Tangent:

Secant:

Two circles can intersect in…

2

* \_\_\_\_\_ points

1

* \_\_\_\_\_ point

No

* \_\_\_\_\_ points

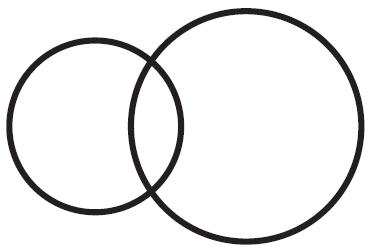
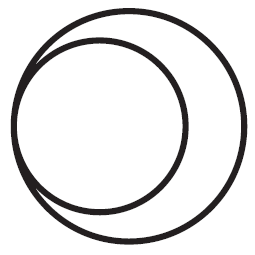
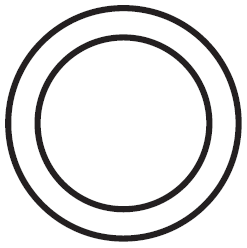
## Common tangents

two

tangent

Lines \_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_ circles

How many common tangents do the circles have?

0

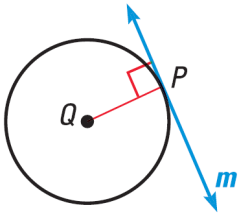
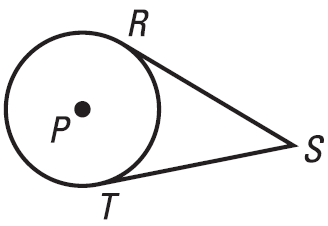
1

2

## Tangent lines are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to \_\_\_\_\_\_\_\_\_\_\_\_\_\_.

radius

perpendicular

## Tangent segments from the same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

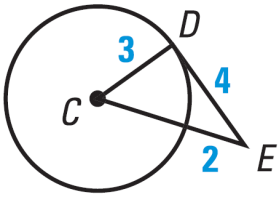
congruent

point

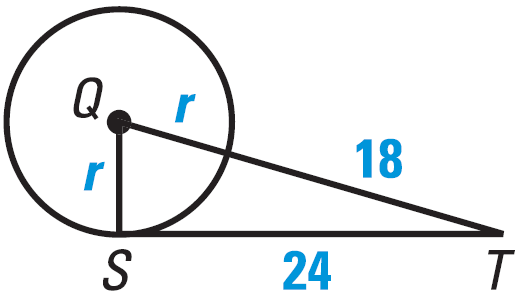
Is tangent to ?

Pythagorean Theorem

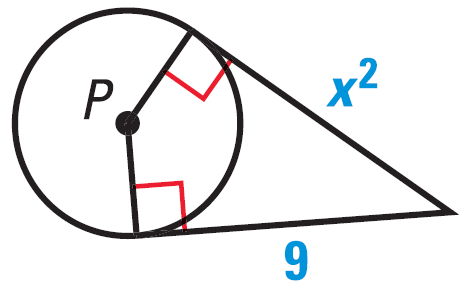
Lines are perpendicular so yes, it is a tangent



is a tangent to . Find the value of r.



Find the value of x.



Assignment: 655 #4-32 even, 36, 38, 43-47 all = 22