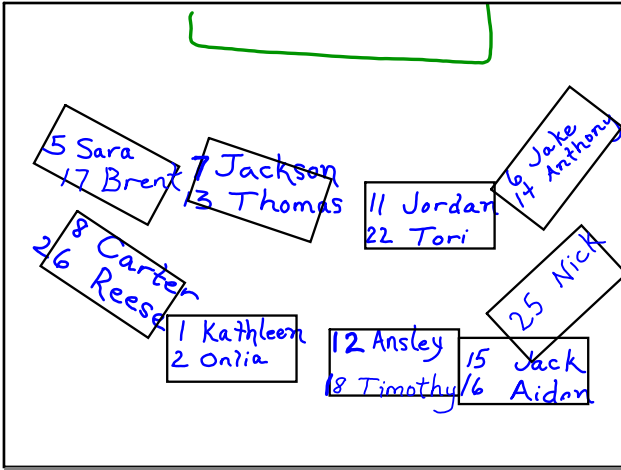


Cirtcle Vocab and Central Angles



Pg 3

Which transformation of $\triangle HIJ$ does NOT result in a congruent triangle?

A. A reflection across the x-axis, followed by a rotation of 180° about the origin. ≡

B. A rotation by 180° about the origin, followed by a translation of 2 units left and 3 units down. ≡

C. A translation of 1 unit right and 2 units up, followed by a dilation with a scale factor of 3. ≠

D. A dilation with a factor of 2, followed by a dilation with a factor of 0.5. ≡

In right triangle ABC, $\angle A$ and $\angle B$ are complementary angles. The value of $\cos(A) = \frac{5}{13}$. What is the value of $\sin(B)$?

A. $\frac{5}{13}$ B. $\frac{12}{13}$ C. $\frac{13}{12}$ D. $\frac{13}{5}$

Parts of a Circle

Circle - set of all points equidistant from a given point C called the center of the circle (in a plane).

(x, y)

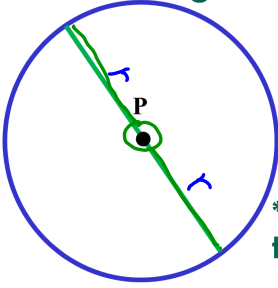
Symbol: ○ C 2-dim.

CHORD: a segment whose endpoints are on the circle

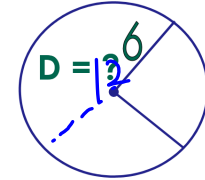
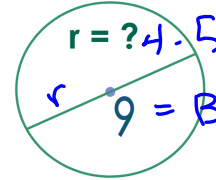
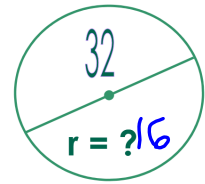
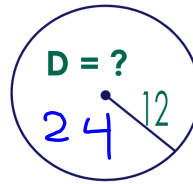
RADIUS: distance from the center to a point on the circle

Circle Vocab and Central Angles

DIAMETER: distance across the circle through its center.

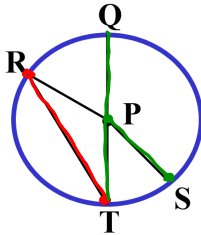


*Also known as the longest chord!

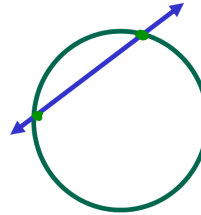


Use $\odot P$ to determine whether each statement is *true* or *false*.

- \overline{RT} is a diameter.
F chord
- \overline{PS} is a radius.
T
- \overline{QT} is a chord.
T Diameter

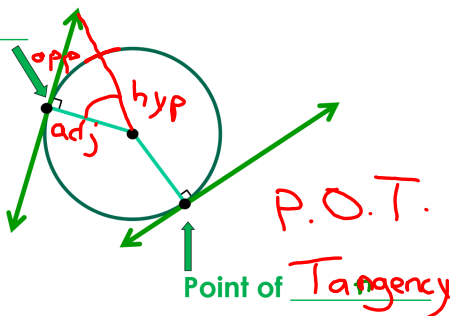


A secant intersects the circle at exactly TWO points.

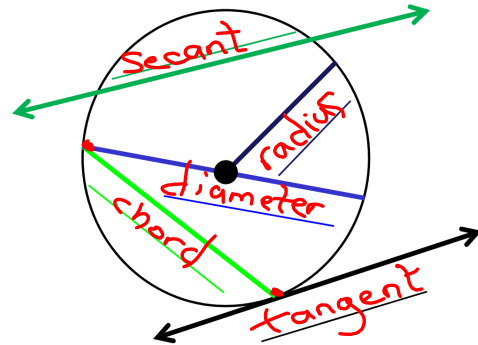


A tangent is a LINE that intersects the circle exactly ONE time

Always \perp to the radius.



Name the term that best describes the line.



Circle Vocab and Central Angles

Concentric Circles

Same center but different radii

No points of intersection

Central Angle: An Angle whose vertex is at the center of the circle

Major Arc

Minor Arc

$\widehat{ACB} > 180^\circ$
 or
 \widehat{BCA}

$\widehat{AB} < 180^\circ$
 or
 \widehat{BA}

Three Letters Two Letters

Semicircle: An Arc that equals 180°

To name: use 3 letters

\widehat{EDF}
 or
 \widehat{FDE}

measure of an arc = measure of central angle

$m\widehat{AB} = 96^\circ$
 $m\widehat{ACB} = 264^\circ$
 $m\widehat{AE} = 84^\circ$

Arc Addition Postulate

$m\widehat{BC} + m\widehat{AB} = m\widehat{ABC}$
 \widehat{CBA}

Identify the measure of the following arcs.

$m\widehat{DAB} = 240^\circ$
 $m\widehat{BCA} = 260^\circ$

Circle Vocab and Central Angles

Identify the measure of the following arcs.

$$m\widehat{CB} = 80^\circ$$

$$m\widehat{BD} = 120^\circ$$

$$m\widehat{EA} = 40^\circ$$

$$m\widehat{DAB} = 240^\circ$$

$$m\widehat{AB} = 60^\circ$$

$$m\widehat{ACE} = 320^\circ$$

