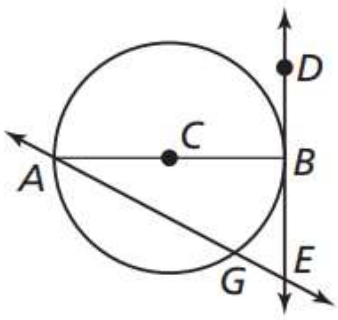
Chapter 10 Test Rev.

Tuesday, September 5, 2017 1:18 PM

Test Review!
Calculator allowed



Tell whether the line, ray, or segment is best described a *radius*, *chord*, *diameter*, *secant*, or *tangent* of $\odot C$.

a. $\overline{AC}$ - radius **b.** $\overline{AB}$ - Diameter

c. $\overrightarrow{DE}$ - tangent **d.** $\overleftrightarrow{AE}$ - Secant

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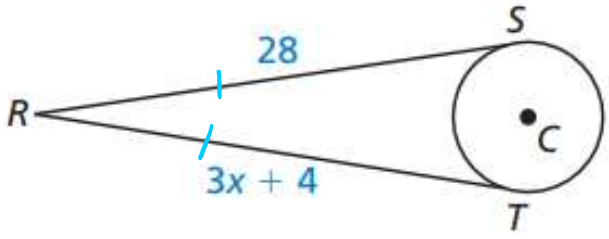
$\overline{RS}$ is tangent to $\odot C$ at S, and $\overline{RT}$ is tangent to $\odot C$ at T. Find the value of x.



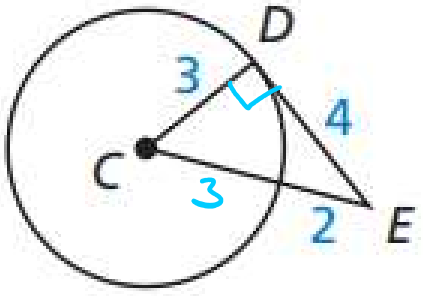
$28 = 3x + 4$

$-4 \quad -4$

$\frac{24}{3} = \frac{3x}{3}$

$8 = x$

Is $\overline{DE}$ tangent to $\odot C$? (state why or why not)



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

$3^2 + 4^2 = 5^2$

$9 + 16 = 25$

$25 = 25$ ✓

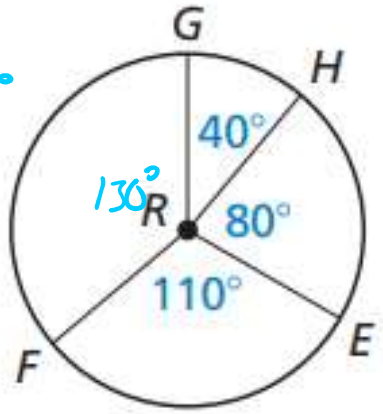
yes, $\overline{DE}$ is tangent because $\angle CDE$ is right.

Find the measure of each arc. (give your answer as a complete statement)

a. $\overset{\frown}{GE}$ $m\overset{\frown}{GE} = 120°$

b. $\overset{\frown}{GEF}$ $m\overset{\frown}{GEF} = 230°$

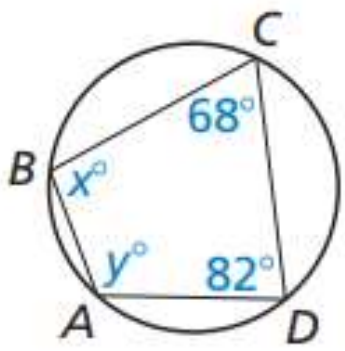
c. $\overset{\frown}{GF}$ $m\overset{\frown}{GF} = 130°$



$120 + 110 = 230$

$360 - 230 = 130$

Find the value of each variable.



$x + 82 = 180$

$-82 \quad -82$

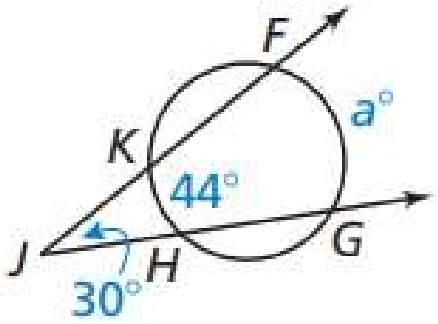
$x = 98$

$y + 68 = 180$

$-68 \quad -68$

$y = 112$

Find the value of the variable.

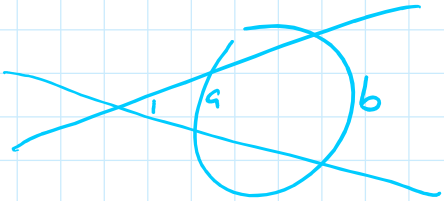


$2(30) = \left(\frac{a-44}{2}\right)2$

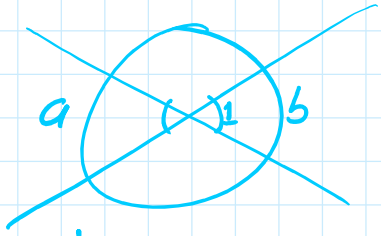
$60 = a - 44$

$+44 \quad +44$

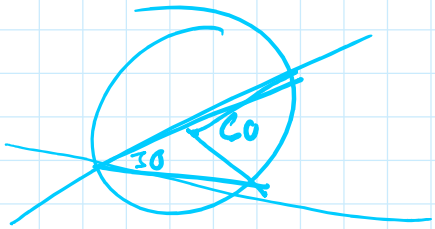
$104 = a$



$\frac{b-a}{2} = m\angle 1$



$\frac{a+b}{2} = m\angle 1$



Write the standard equation of the circle with the given center and radius.

center: $(-2, 5)$, radius: 7

$(x-h)^2 + (y-k)^2 = r^2$

$(x-(-2))^2 + (y-5)^2 = 7^2$

either → $(x+2)^2 + (y-5)^2 = 7^2$

or → $(x+2)^2 + (y-5)^2 = 49$

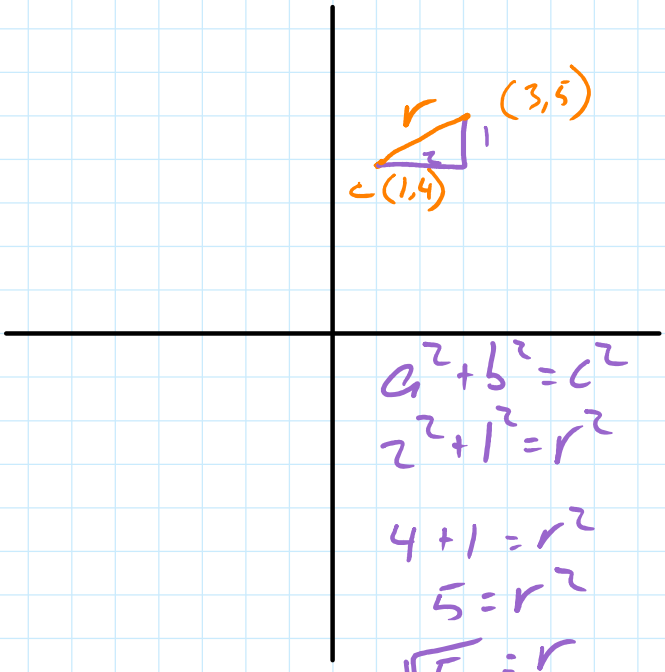
either → $(x+2)^2+(y-5)^2=49$

The point (3, 5) is on a circle with center (1, 4). Write the standard equation of the circle.

$(x-h)^2+(y-k)^2=r^2$

$(x-1)^2+(y-4)^2=\sqrt{5}^2$

$(x-1)^2+(y-4)^2=5$



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

$2^2+1^2=r^2$

$4+1=r^2$

$5=r^2$

$\sqrt{5}=r$

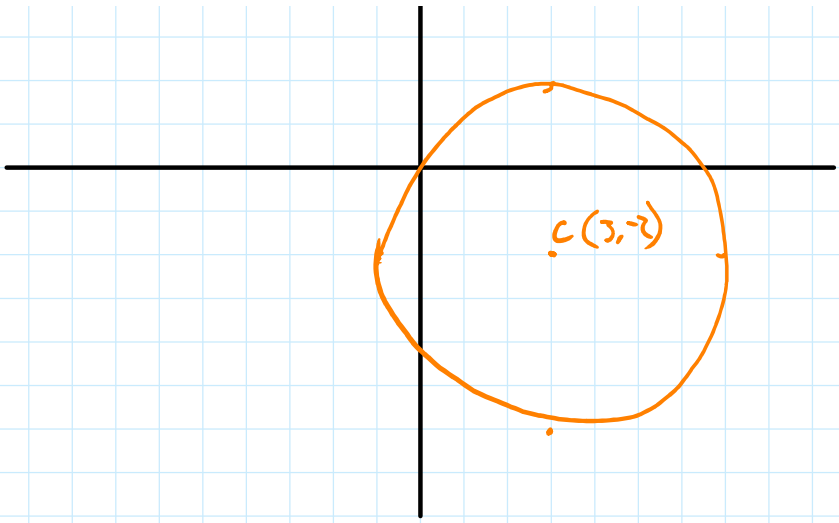
State the center and radius then graph the circle that is represented by the following equation.

$(x-3)^2+(y+2)^2=16$

$(x-h)^2+(y-k)^2=r^2$

center $=(h,k)=(3,-2)$

radius $=4$



22 total questions

Good Luck!!

1 sheet of paper of notes