

Welcome! Please grab your ISN and warmup
and have a seat!

Translate this circle up 3 and left 5. Then
dilate the **NEW** circle by a factor of $1/2$.
Give the equation of the final circle.

$(x - 6)^2 + (y + 4)^2 = 64$ $C(6, -4)$ $r = 8$
 translation -5 $+3$ \downarrow
 $C'(1, -1)$ $r = 8\left(\frac{1}{2}\right)$
 dilation $C''\left(\frac{1}{2}, -\frac{1}{2}\right)$ $r = 4$
 $C'' \left(x - \frac{1}{2}\right)^2 + \left(y + \frac{1}{2}\right)^2 = 16$

Nov 3-8:05 AM

WWK:

diameter- a line segment whose endpoints are on the circle and goes thru the center

\overline{AB} & \overline{DE} are diameters.

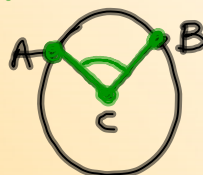


arc- section of the circle between 2 given endpoints.



*noted with \widehat{AB}

central angle- an angle whose endpoints are on the circle and whose vertex is at the center!



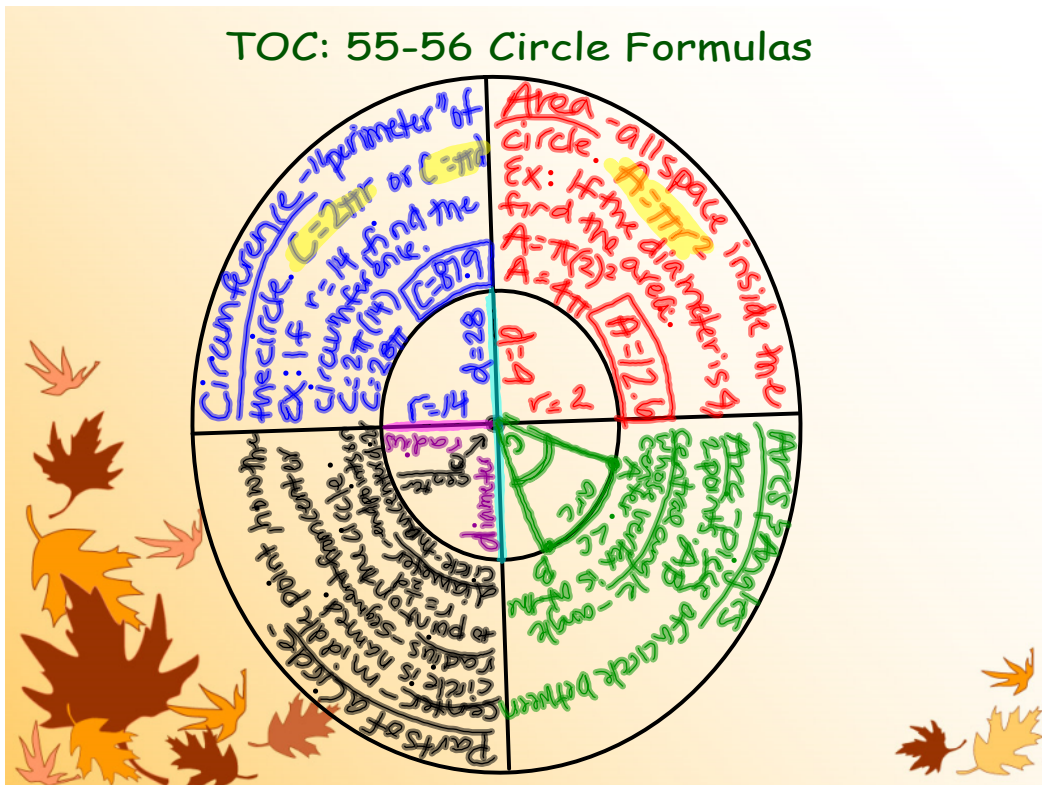
$\angle ACB$ is a central angle

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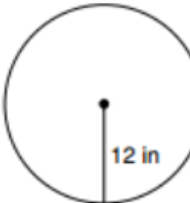
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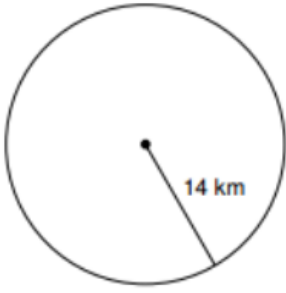
TOC: 55-56 Circle Formulas

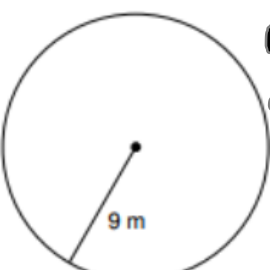



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Ex pg 55- Find the radius, diameter, area, circumference

1)  $r =$
 $d =$
 $C =$
 $a =$

2)  $r =$
 $d =$
 $C =$
 $a =$

3)  $r =$
 $d =$
 $C =$
 $a =$

4)  $r =$
 $d =$
 $C =$
 $a =$

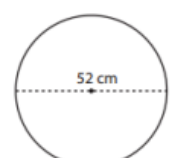
5) radius = 2.6 in $r =$
 $d =$
 $C =$
 $a =$


6) radius = 34.1 in $r =$
 $d =$
 $C =$
 $a =$

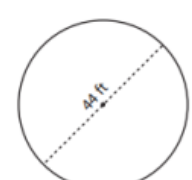
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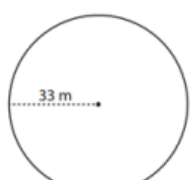
HOMWORK

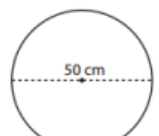
Find the area and circumference of each circle. Round the answer to tenth decimal place. (use $\pi=3.14$)


1)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

2)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

3)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

4)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

5)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

6)  Radius = _____
 Diameter = _____
 Area = _____
 Circumference = _____

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