

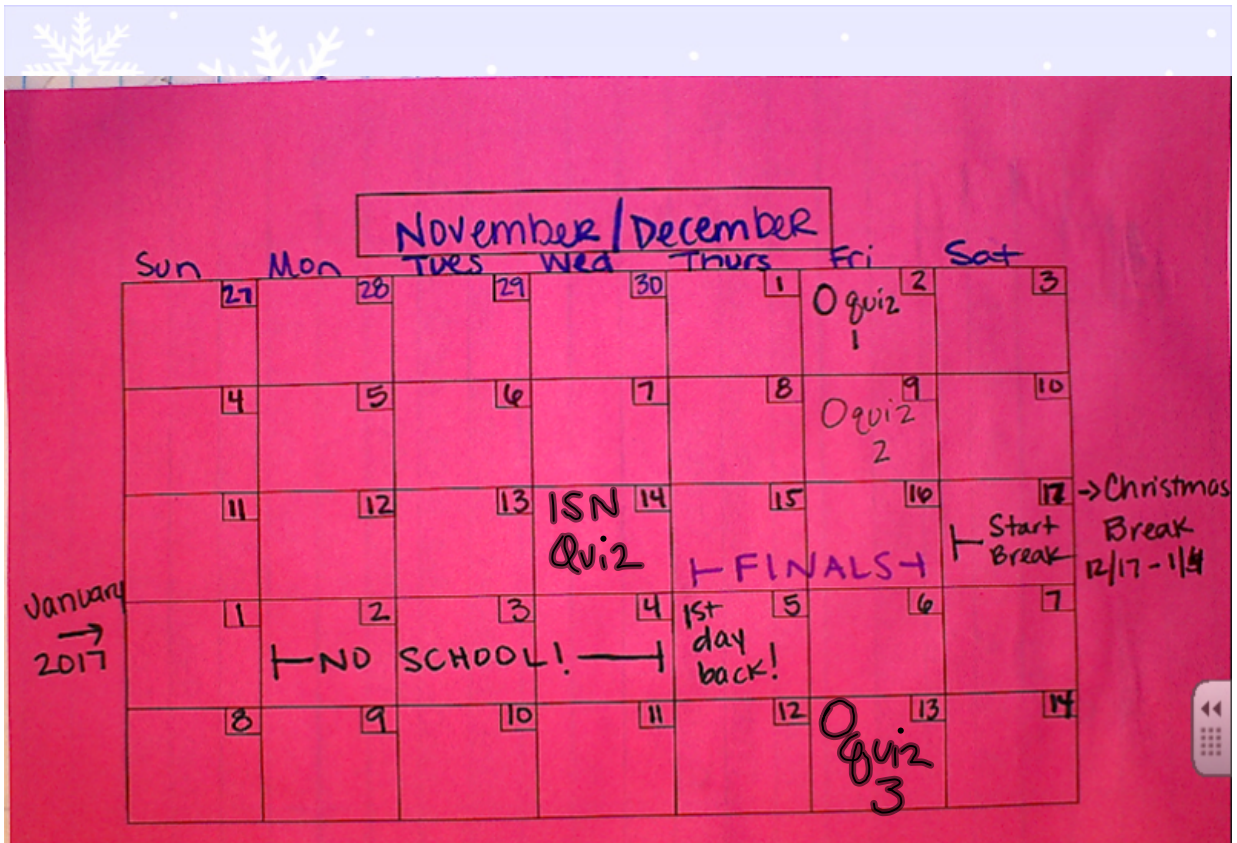
Oct 30-7:49 AM

51

Strand **4** TITLE: **Circles**


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Oct 30-8:00 AM

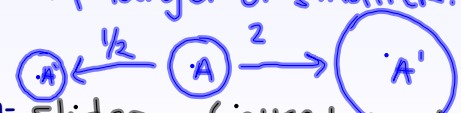



Nov 28-7:53 AM

WWK:

circle- a set of points all equidistant from a given center. named by its center 

radius- a line segment from the center of a circle to any point on the circle.  $\overline{X2}$ & $\overline{X4}$ are radii

dilation- a scale model of a figure that is proportionally larger or smaller. $A \rightarrow A'$ 

translation- Slides a figure left, right, up or down without changing the size or shape. 

Oct 30-8:01 AM

TOC pg 56 Equation of a Circle

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

(h, k) center r radius

$\sqrt{r^2} = r$

r	r^2
1	1
2	4
3	9
4	16
5	25
6	36
7	49
8	64
9	81
10	100
11	121
12	144
13	169
14	196
15	225

① $x^2 + y^2 = 9$ center $(0,0)$
 $r = \sqrt{9} = 3$

$(x-4)^2 + (y-1)^2 = 25$
center $(4,1)$
radius $= \sqrt{25} = 5$

$(x+7)^2 + (y-1)^2 = 81$
center $(-7,1)$
 $r = \sqrt{81} = 9$

$x^2 + y^2 = 144$
center $(0,0)$
 $r = \sqrt{144} = 12$

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TOC pg 56 Equation of a Circle

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

center $(3,2)$

$r = \sqrt{16} = 4$

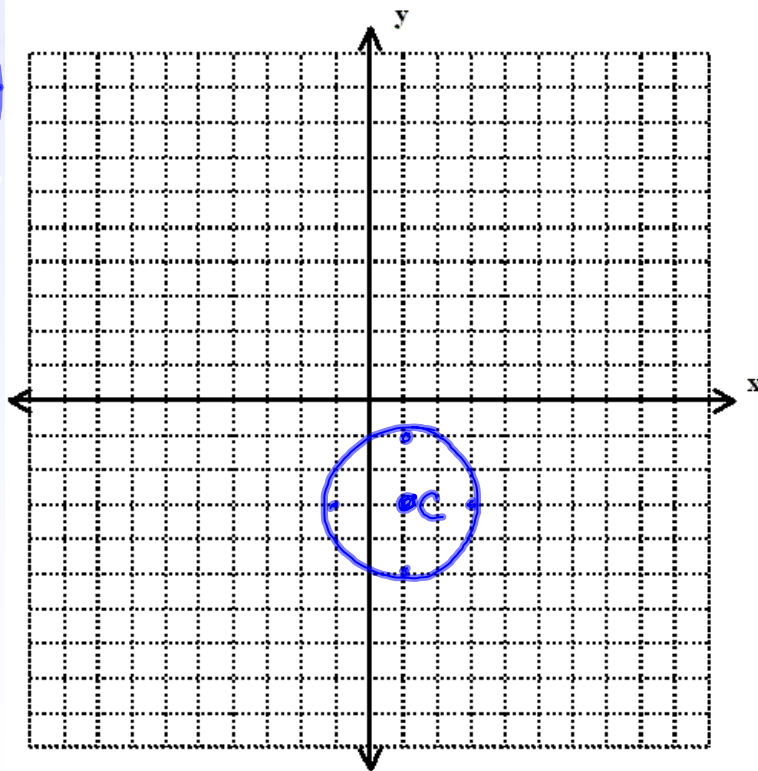
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TOC pg 56 Equation of a Circle

$$(x-1)^2 + (y+3)^2 = 4$$

$$(1, -3) \text{ C}$$

$$r = \sqrt{4} = 2$$



Oct 30-8:03 AM

Part I

Identify the coordinates of the center and the length of the radius in the circles below.

1) $(x - 1)^2 + (y - 3)^2 = 9$

radius:

Center: (__, __)

2) $(x + 14)^2 + (y - 5)^2 = 16$

radius:

Center: (__, __)

3) $(x - 5)^2 + (y - 1)^2 = 25$

radius:

Center: (__, __)

HW:

Part 2

Write the equation of the circle with the given radius and center:

4) C (5, -6) radius = 3

5) C (0, 0) radius = 8

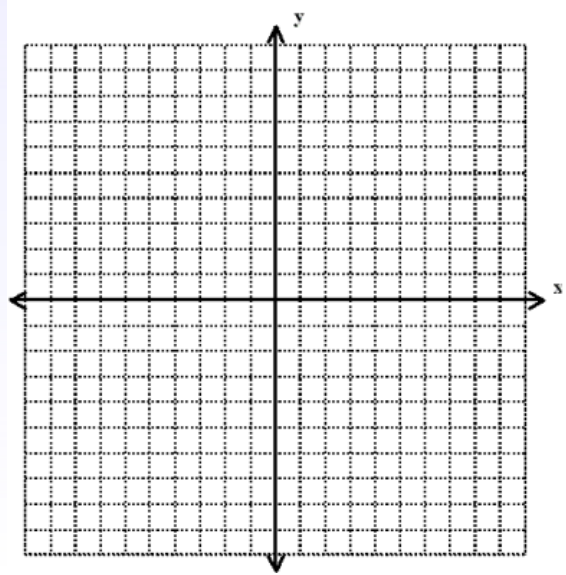
6) C (2, 4) radius = 1

Graph all 6 circles on one piece of graph paper... divide it into 4 sections and graph one in each section on the front, then the last two on the back.

Oct 30-9:11 AM

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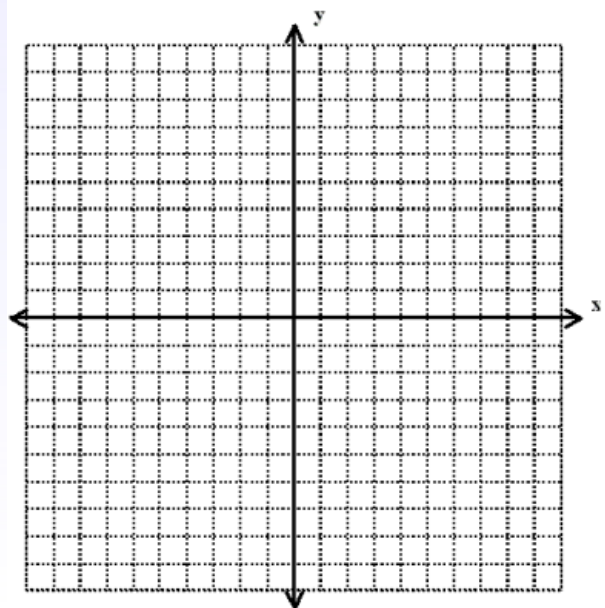
TOC pg 55 Equation of a Circle



Oct 30-8:03 AM

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TOC pg 55 Equation of a Circle

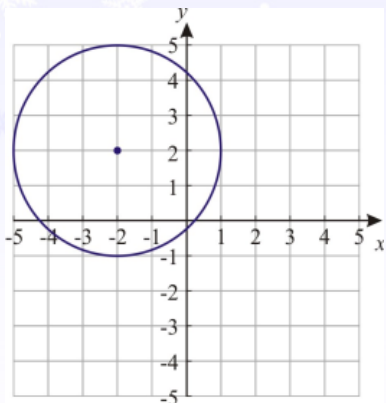


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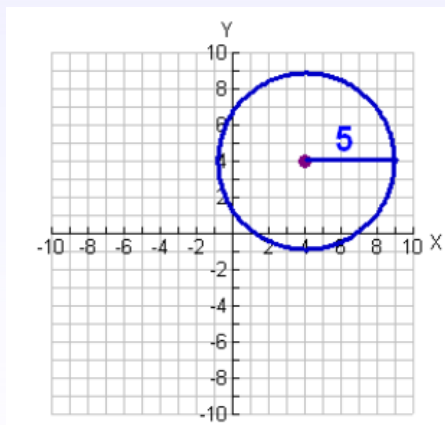
Welcome! Please grab your ISN and warmup and have a seat!

Give the equation of each circle:

1



2



Nov 2-10:27 AM