Name: _____ Date _____

Topic : *Equations of Circles - Worksheet 1*

1 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-8x+y^2-8y-12=0$

2 State the equation of a circle in standard form which has a center at (-6, 4) and a radius of 5.

3 Write the center-radius equation of a circle with a center at (4,-4) and passes through the point (-7, 3).

4 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (10, 3).

5 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-7x+y^2+16y+43=0$

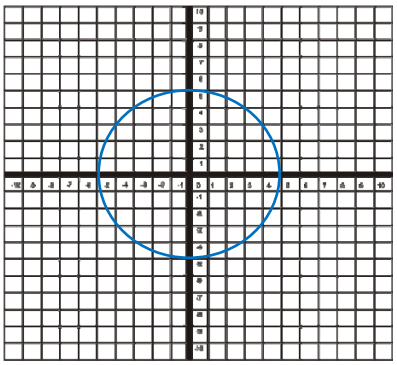
6 State the equation of a circle in standard form which has a center at (-6,8) and a radius of 4.

7 Write center-radius equation of a circle with a center at (11, 3) and passes through the point (3,-4).

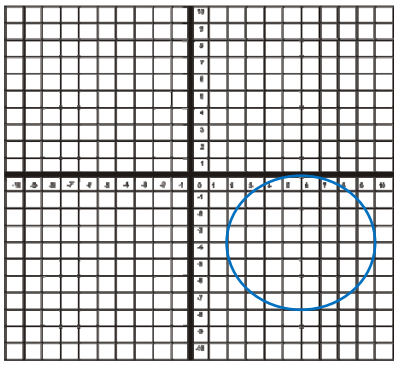
8 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (7,-3).

Write center-radius equation of the circle whose graph is shown below

9



10



Name: _____ Date _____

Topic : *Equations of Circles - Worksheet 2*

1 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-6x+y^2-6y-8=0$

2 State the equation of a circle in standard form which has a center at (-9,6) and a radius of 10.

3 Write the center-radius equation of a circle with a center at (5,-6) and passes through the point (-8,4).

4 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (14,2).

5 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-8x+y^2-12y-20=0$

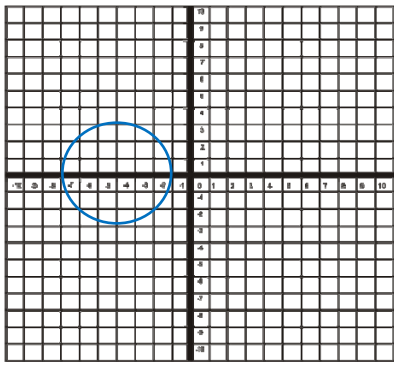
6 State the equation of a circle in standard form which has a center at (-7,6) and a radius of 6.

7 Write center-radius equation of a circle with a center at (15, 5) and passes through the point (5,-8).

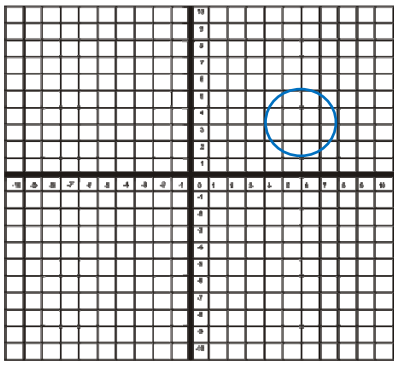
8 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (8,-6).

Write center-radius equation of the circle whose graph is shown below

9



10



Name: _____ Date _____

Topic : *Equations of Circles - Worksheet 3*

1 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-5x+y^2-7y-8=0$

2 State the equation of a circle in standard form which has a center at (-10, 4) and a radius of 11.

3 Write the center-radius equation of a circle with a center at (8, 6) and passes through the point (12, 6).

4 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (-12, 5).

5 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-2x+y^2-4y-12=0$

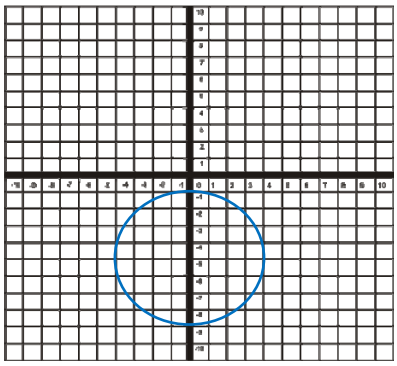
6 State the equation of a circle in standard form which has a center at (-9, 8) and a radius of 8.

7 Write center-radius equation of a circle with a center at (11, 6) and passes through the point (6,-9).

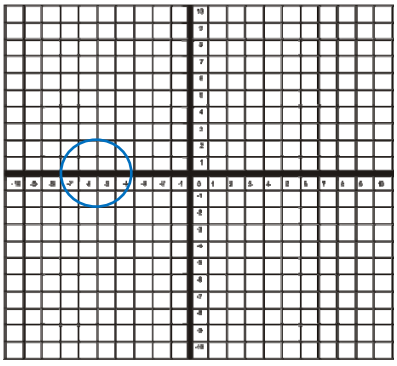
8 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (9,-7).

Write center-radius equation of the circle whose graph is shown below

9



10



Name: _____ Date _____

Topic : *Equations of Circles - Worksheet 4*

1 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-3x+y^2-10y-18=0$

2 State the equation of a circle in standard form which has a center at (-16,9) and a radius of 13.

3 Write the center-radius equation of a circle with a center at (9, 12) and passes through the point (15, 12).

4 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (-2, 8).

5 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-5x+y^2-2y-11=0$

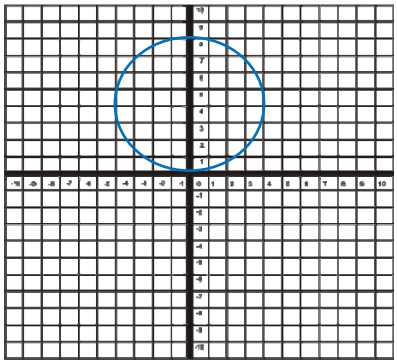
6 State the equation of a circle in standard form which has a center at (-7, 5) and a radius of 18.

7 Write center-radius equation of a circle with a center at (17, 8) and passes through the point (11,-12).

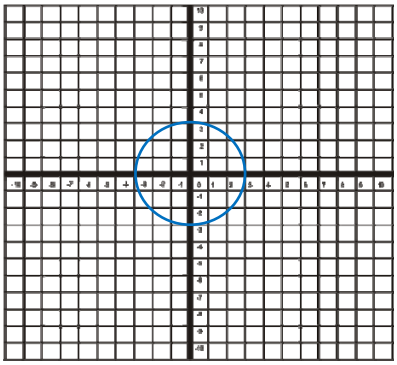
8 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (14,-12).

Write center-radius equation of the circle whose graph is shown below

9



10



Name: _____ Date _____

Topic : *Equations of Circles - Worksheet 5*

1 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-7x+y^2-16y-25=0$

2 State the equation of a circle in standard form which has a center at (14,10) and a radius of 10.

3 Write the center-radius equation of a circle with a center at (4, 11) and passes through the point (5,3).

4 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (-5,4).

5 Convert this equation into center-radius form. State the coordinates of the center of the circle and its radius.

$x^2-8x+y^2-5y-13=0$

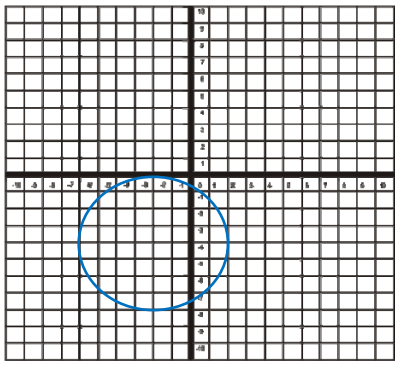
6 State the equation of a circle in standard form which has a center at (-5,3) and a radius of 9.

7 Write center-radius equation of a circle with a center at (20, 10) and passes through the point (9,-8).

8 Write the standard equation of a circle that is tangent to the x-axis, with a center located at (7,-6).

Write center-radius equation of the circle whose graph is shown below

9



10