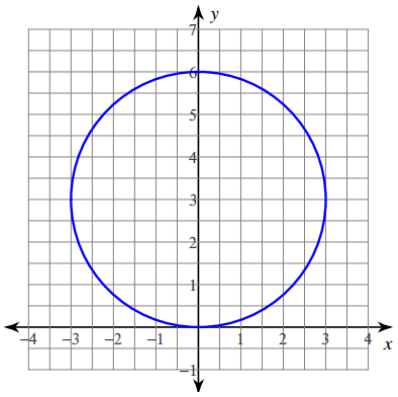
Name: _____ Period: _____

Checkpoint 9A *Integrated Math 2*

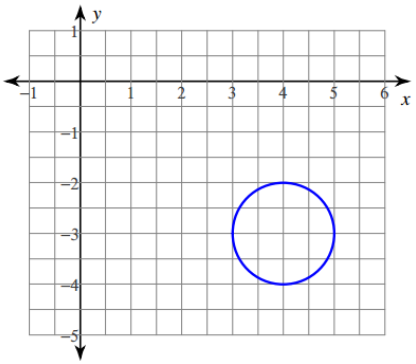
Answer the questions thoroughly including any necessary math or explanations.

1) Write the equation of a circle that represents the graph.

a)

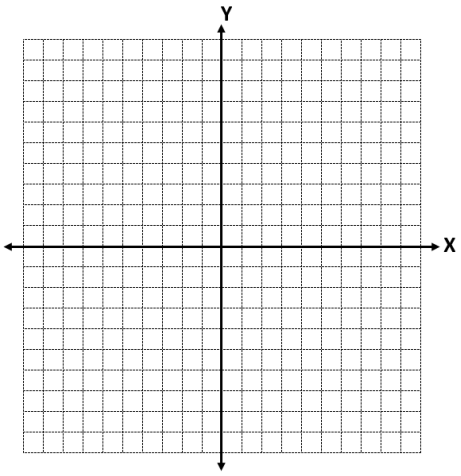


b)



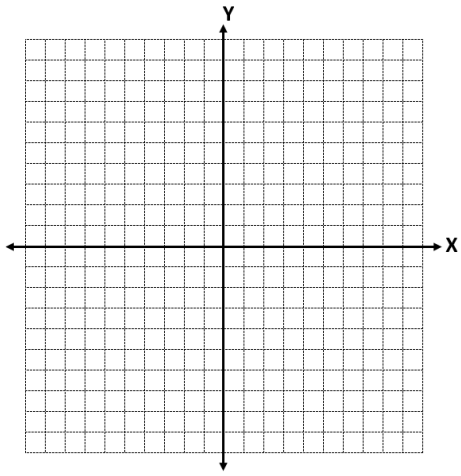
2) Graph the circle.

$(x)^2+(y-4)^2=25$



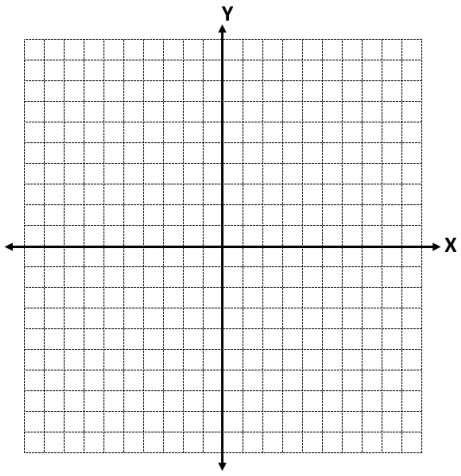
3) Graph the circle

$(x+2)^2+(y)^2=49$



4) Graph the circle

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



5) Describe the transformation from $\odot A$ to $\odot A'$ if $\odot A$ has a center of (2,3) and radius of 5 and $\odot A'$ has a center of (-1,4) and radius of 10.

6) Describe the transformation from $\odot B$ to $\odot B'$ if $\odot B$ has a center of (0,-3) and radius of 2 and $\odot B'$ has a center of (-2,5) and radius of 6.

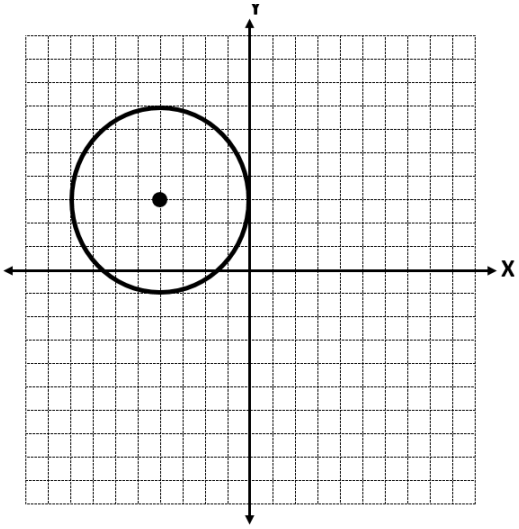
7) Describe the transformation from $\odot D$ to $\odot D'$ if $\odot D$ has a center of (2,8) and radius of 5 and $\odot D'$ has a center of (-2,4) and radius of 1.

8) Describe the transformation from $\odot E$ to $\odot E'$ if $\odot E$ has a center of (12,32) and radius of 15 and $\odot E'$ has a center of (-1,4) and radius of 10.

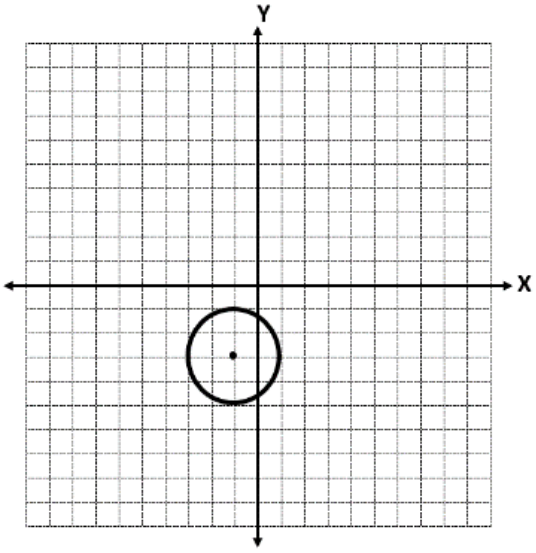
9) Write the equation of a circle that is translated left 4 and up 2 and dilated 3 from $(x-16)^2+(y-6)^2=1$.

10) Write the equation of a circle that is translated left 5 and down 4 and dilated 5 from $(x+5)^2+(y+7)^2=36$.

11) Describe the translation from the graphed circle to $(x-2)^2+(y+7)^2=9$.



12) Describe the translation from the graphed circle to $(x+4)^2+(y-2)^2=36$.



13) Given $\odot A$ with a central angle $\measuredangle A = 32°$ and $\odot B$ with a corresponding central angle $\measuredangle B = (4x - 8)°$. Set up an equation that models this situation and solve for x.

14) Given $\odot C$ with a central angle $\measuredangle C = 56°$ and $\odot D$ with a corresponding central angle $\measuredangle D = (67 - 3x)°$. Set up an equation that models this situation and solve for x.