1. Write the equation of a circle where $(-9,14)$ and $(-5,-6)$ are endpoints of a diameter.
2. Does the point $(3, \sqrt{5})$ lie on a circle with center $(2,0)$ and radius 3 ? Show the calculations that lead to your conclusion.

## GPE-A1b

3. Find the center and radius of a circle whose equation is $x^{2}-8 x+y^{2}+2 y=-8$
4. Find the center and radius of a circle whose equation is $x^{2}+4 x+y^{2}-6 y=3$. Then, sketch the circle onto the graph.

5. Drawn below is a circle with 4 tangent lines.

Find the perimeter of the quadrilateral formed by the tangent lines.

7. Find the measure of $\angle U$

## C-A3a

8. Find the measure of $\angle C$

9. DB and DC are tangent to circle A. Find the measures of $\angle A$ and $\widehat{C E B}$.

10. Find the measure of $\angle C A B$

