

Write the equation of the circle with a center at $P(-5, -3)$ and passing through the point $(-1, -2)$.

Write the equation of the circle with a center at $Q(0, 5)$ and passing through the point $(3, -2)$.

A circle has a center at $(-6, -2)$ and a radius of $2\sqrt{15}$. Does the circle pass through the point $(-1, 4)$?

Does the circle pass through the point $(5,5)$ if the center is at $(2, 1)$ and the radius is 5?

Write the equation of a circle that has a center at $(6,-4)$ and a diameter of 18.

Find the arc length. Leave your answers in terms of π .

a)

