

1. Find the distance between the points  $(0, -5)$  and  $(2, 3)$  and the midpoint of the line segment joining them.

2. Write the equation for the circle with center  $(-2, 3)$  and radius 4.

3. Find the center and radius of the circle given by the equation

$$x^2 + 4x + y^2 - 6y = 12$$