Math 2001 August 29, 2019 Homework 4

Read section p4 from your text.

1. Find the equation of the circle with center (3,-5) and radius 10 .

2. Find the center and radius of the circle $x^2 - 4x + y^2 + 49y = 0$

HINT: Complete the squares. See example 9 on pages 29-30.

3. Find the equation of the circle with center (2,3) which passes through the point (-10,11) .

HINT: First find the radius using the distance formula: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$

4. Consider the parabola $y = -16x^2 + 90x + 700$ HINT: pages 31-32, especially example 12

a. Find the y-axis intercept (x=0).

b. Find the x-axis intercepts (y=0).

c. Find the vertex.