

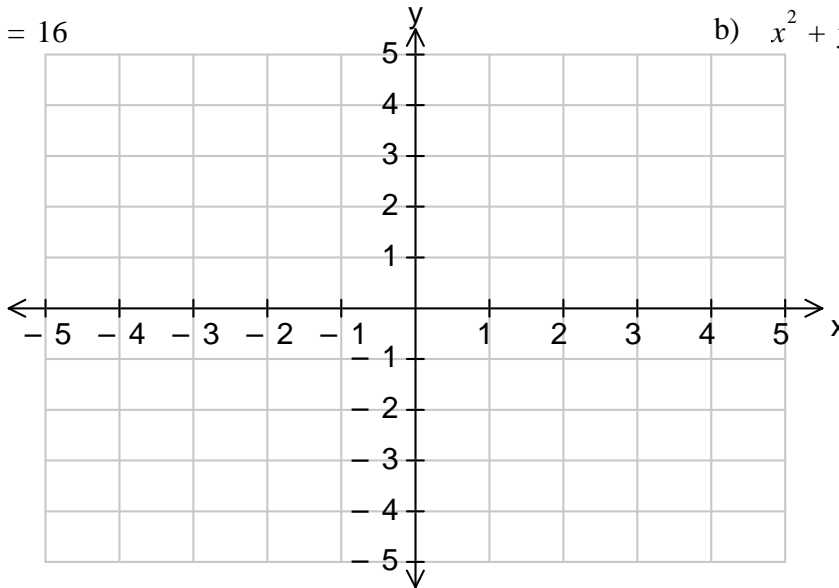
C2-4.4) Name:

Homework Questions 4 – Equations of Circles

1. Plot the following graphs on the axis below

a) $x^2 + y^2 = 16$

b) $x^2 + y^2 = 4$



2. Find the coordinate of the center of the following circle

a) $x^2 + y^2 = 36$

b) $(x - 3)^2 + y^2 = 56$

c) $(x + 2)^2 + (y - 5)^2 = 76$

d) $x^2 + (y + 7)^2 = 58$

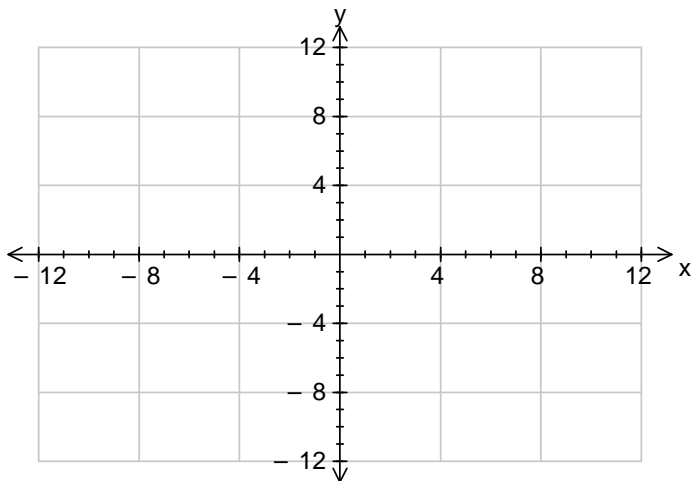
3. Find the length of the radius of the following circles

a) $x^2 + y^2 = 100$

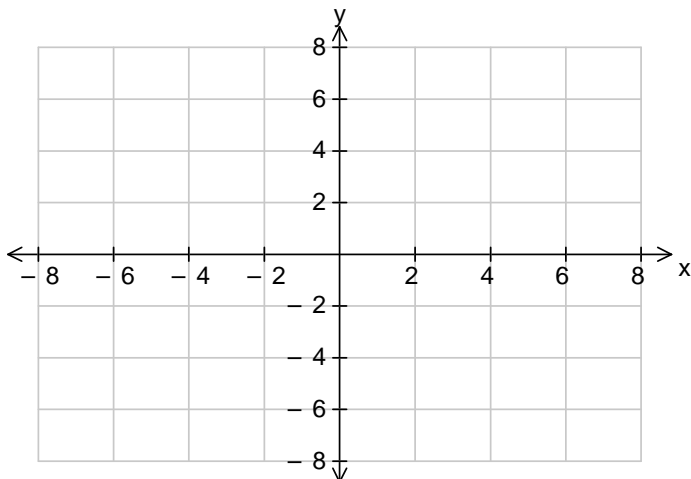
b) $(x + 2)^2 + (y - 3)^2 = 49$

c) $(x - 5)^2 + (y + 8)^2 = 30$

4. Draw the graph and state the centre and radius of the circle $(x - 3)^2 + (y - 1)^2 = 36$



5. Draw the graph of $(x + 2)^2 + y^2 = 16$



6. Show that the following circle pass through the point (5,9)
 $(x - 3)^2 + (y - 4)^2 = 29$

7. The point P(2,-3) lies on the circle centre (7,5).
 a) Find the equation of the circle
 b) Find the equation of the tangent to the circle at P

