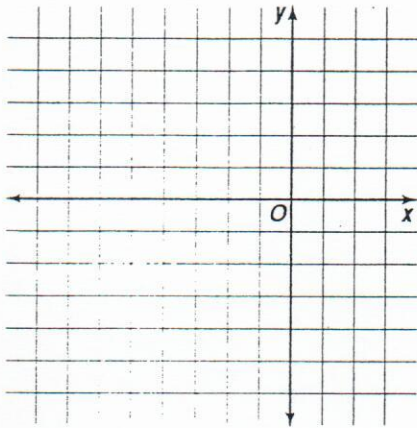


Practice

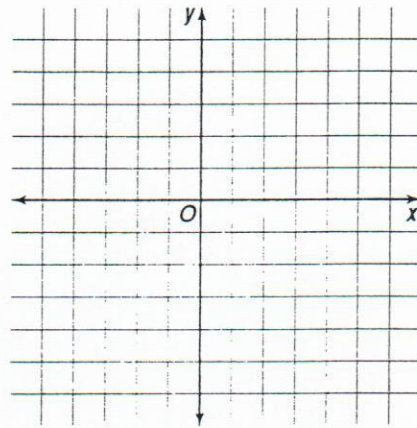
Circles

Find the coordinates of the center and the radius of each circle whose equation is given. Then draw the graph.

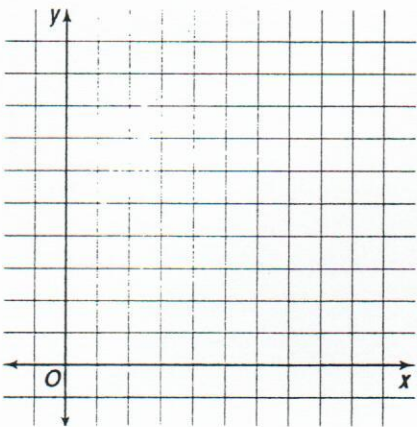
1. $(x + 3)^2 + y^2 = 16$



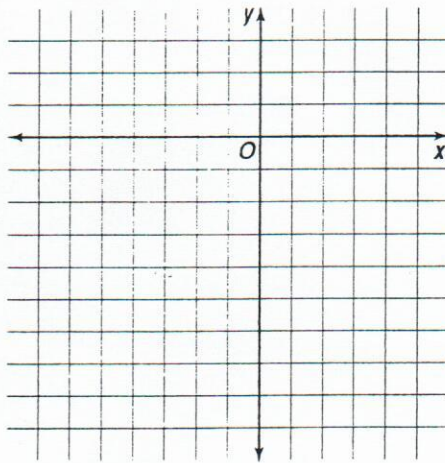
2. $3x^2 + 3y^2 = 12$



3. $x^2 + y^2 - 6x - 12y + 36 = 0$



4. $x^2 + y^2 + 2x + 6y = 26$



Write an equation for each circle if the coordinates of the center and length of the radius are given.

5. center $(-4, 2)$; radius 8

6. center $(5, -6)$; radius 11

7. center $(-\frac{1}{4}, -\sqrt{3})$; radius $5\sqrt{2}$

8. center $(3.8, 1\frac{1}{3})$; radius $\frac{3}{7}$