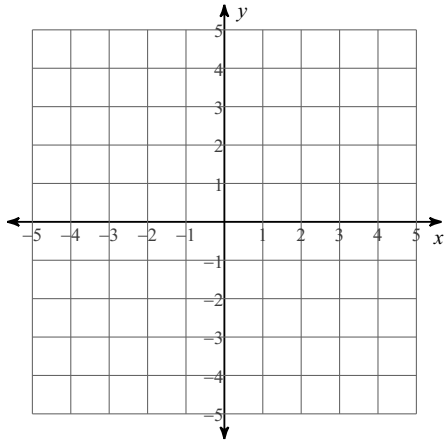


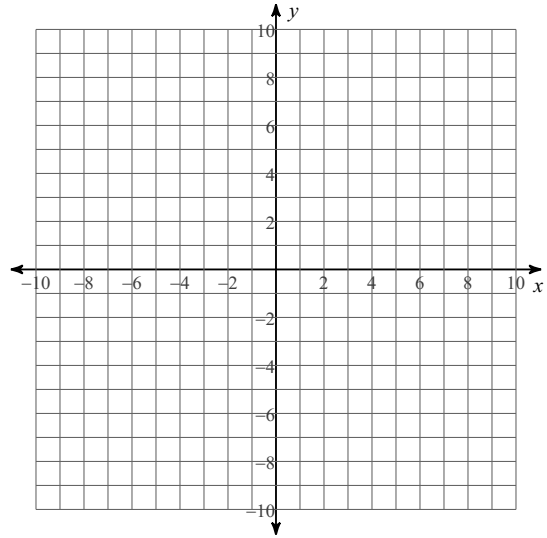
Solving Systems of Equations by Graphing

Solve each system of equations by graphing. State your answer(s) as ordered pairs.

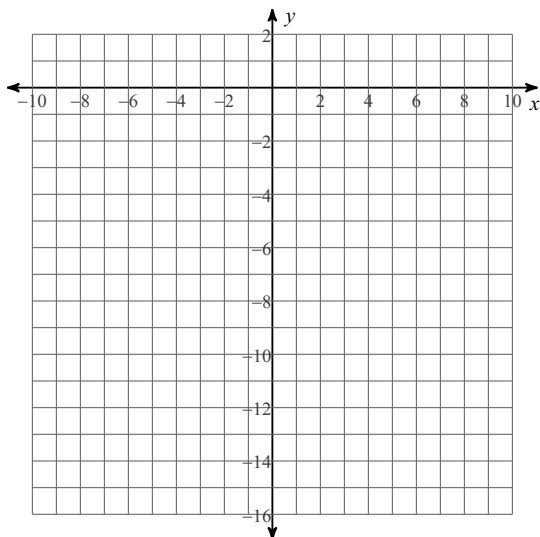
1) $y = \frac{1}{2}x + 1$
 $y = 3x - 4$



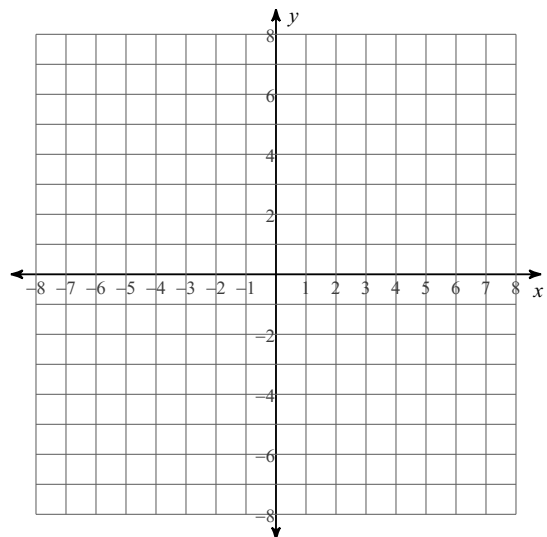
2) $y = 2x - 5$
 $y = (x + 1)(x - 5)$



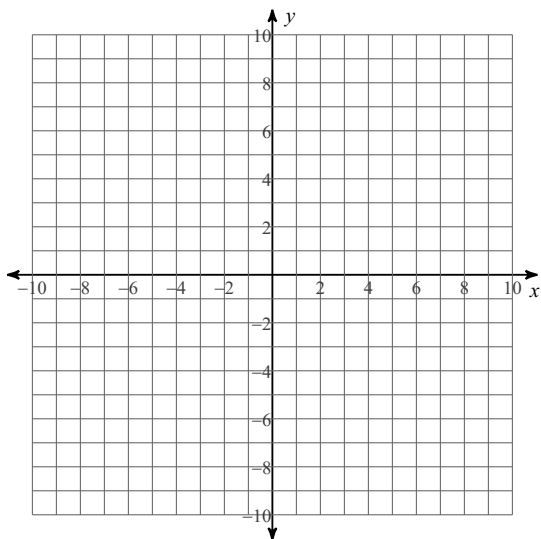
3) $y = -2x^2 - 5$
 $y = -5$



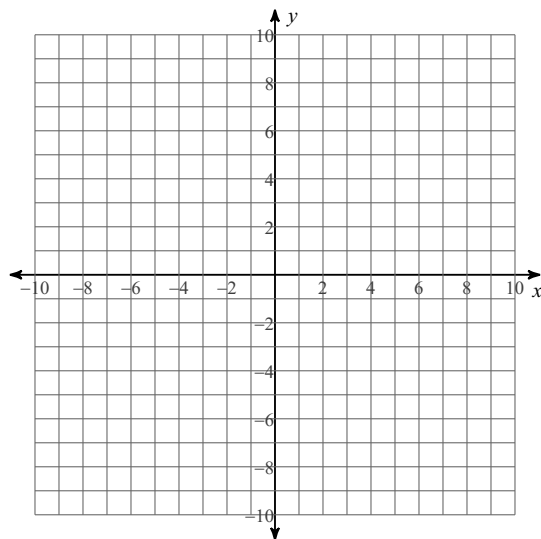
4) $y = -(x - 3)^2 + 4$
 $y = 2x - 5$



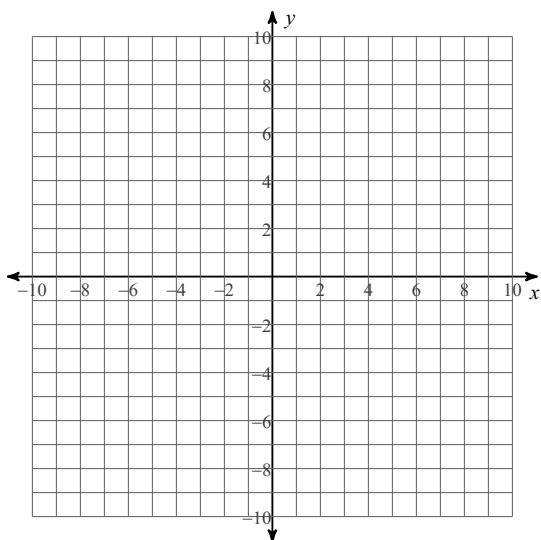
5) $y = -4x - 10$
 $y = x^2 - 4x - 1$



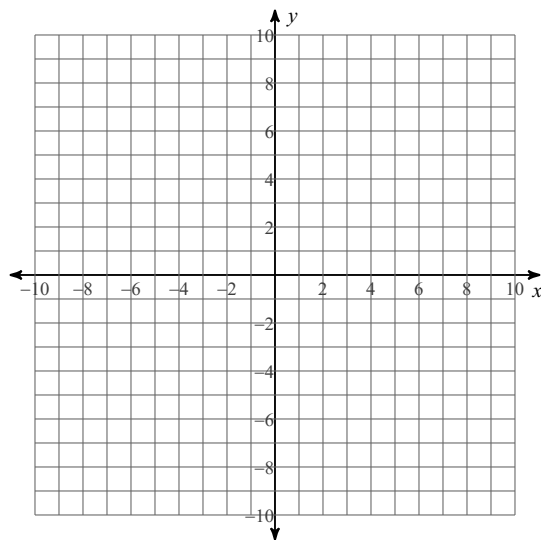
6) $y = -x^2 + 4x + 6$
 $y = -2x + 11$



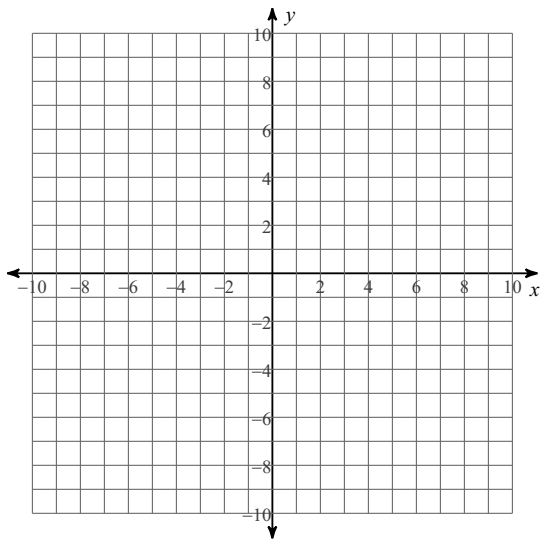
7) $y = (x + 1)^2 - 7$
 $y = \frac{1}{2}x - 7$



8) $y = -x + 7$
 $y = -x^2 + 6x - 3$

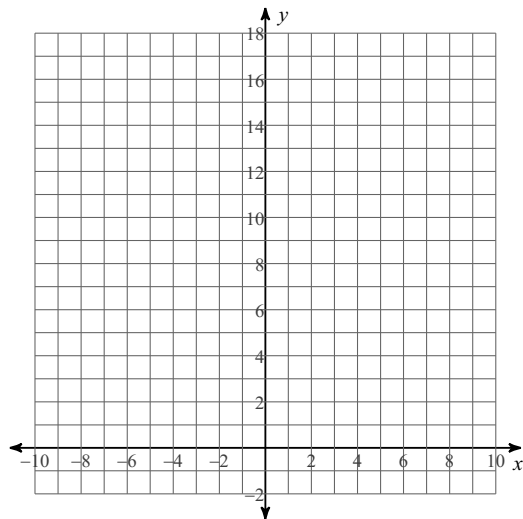


9) $y = (x + 5)(x - 1)$
 $y = 2x + 3$



10) $y = -\frac{1}{2}x + 13$

$(x + 4)^2 + (y - 10)^2 = 25$



Use the information provided to write the standard form equation of each circle.

11) Center: $(-1, 7)$
 Radius: $\sqrt{141}$

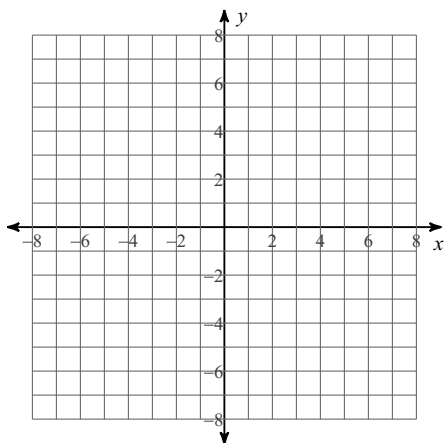
12) Center: $(\frac{21}{2}, 7)$
 Radius: $\sqrt{17}$

13) Center: $(16, 13)$
 Point on Circle: $(16, 14)$

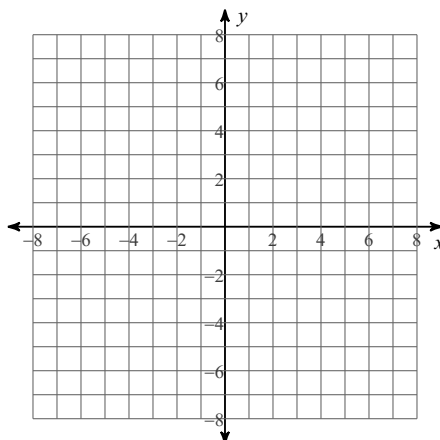
14) Center: $(15, 6)$
 Point on Circle: $(12, 8)$

Identify the center and radius of each. Then sketch the graph.

15) $x^2 + \left(y + \frac{7}{2}\right)^2 = 9$



16) $(x + 1)^2 + (y - 3)^2 = 4$



Factor each completely.

17) $3n^2 + 21n + 36$

18) $b^2 + 3b - 10$

19) $-2p^2 - 22p - 20$

20) $x^2 + 7x + 10$

Solve for x by factoring.

21) $x^2 - 16 = 0$

22) $x^2 - 10x + 24 = 0$

23) $2x^2 - 12x + 10 = 0$

24) $3x^2 - 3x = 0$