

For each parabola described, use the information given to find the location of the missing feature.

1. F: $(2,5)$, D: $y = -3$, V: ? 2. D: $x = 4$, V: $(1,2)$, F: ?
3. If the distance between two points is $\sqrt{55}$ and the points are $(5,-1)$ and $(x,-7)$, solve for x .
4. If the distance between two points is $\sqrt{65}$ and the points are $(9,-1)$ and $(x,-8)$, solve for x .

Write the equation of the circle in standard form. State the center and the radius.

5. $x^2 + 8x + y^2 - 10y - 35 = 0$ 6. $x^2 - 16x + y^2 + 6y + 3 = 0$

Write the equation of the circle in expanded form.

7. Center: $(3,-9)$, Radius: $\sqrt{11}$ 8. Center: $(8,4)$, Area: 16π

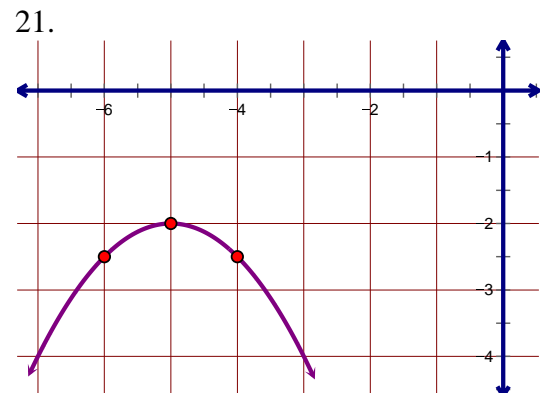
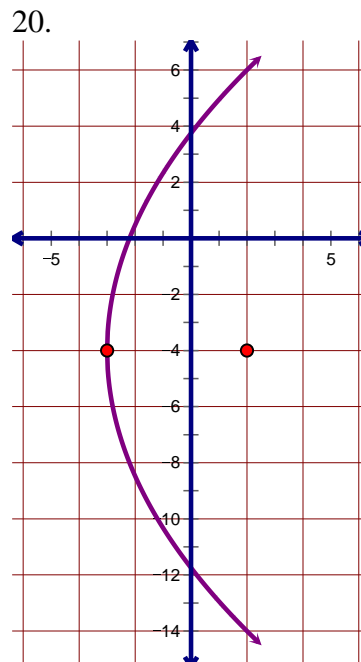
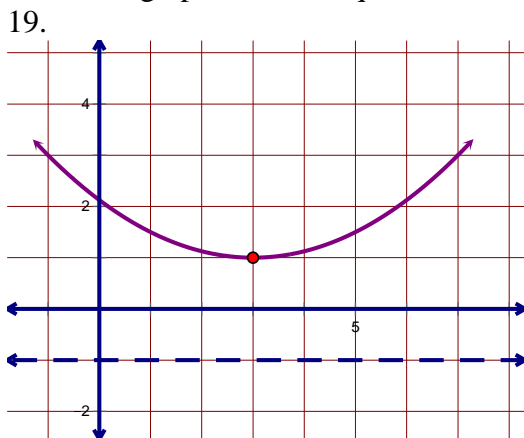
Find the distance between:

9. $(-3,0)$ and $(4,-2)$ 10. $(11,-4)$ and $(5,-13)$ 11. $(-1,-6)$ and $(12,7)$ 12. $(-4,3)$ and $(7,-2)$.

Find the equation of the parabola with the given information and sketch a complete graph.

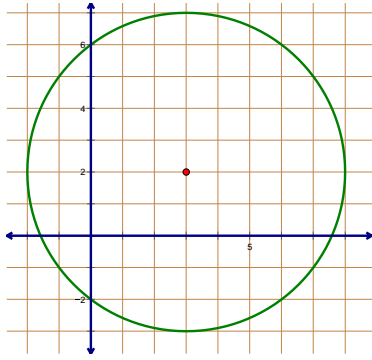
13. D: $y = 6$, F: $(5,-2)$ 14. D: $x = -4$, F: $(6,7)$ 15. V: $(2,11)$, F: $(2,13)$
16. V: $(-1,5)$, D: $x = 5$ 17. D: $x = 6$, V: $(1,-2)$ 18. V: $(-6,5)$, F: $(2,5)$

Given the graph, find the equation of the parabola.

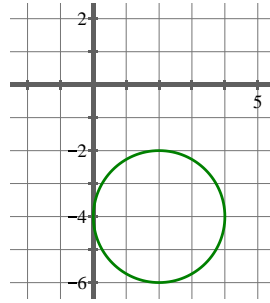


Find the equation of the circle and write it in standard and expanded form.

22.

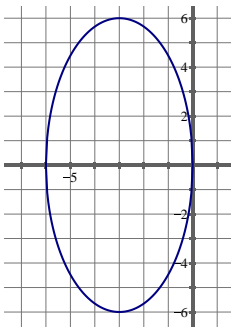


23.

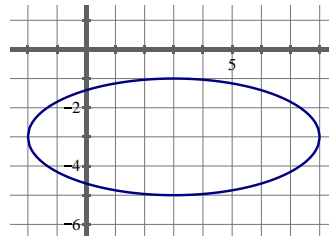


Find the equation of ellipse.

24.



25.



Graph the given equation of the ellipse or circle

26. $(x+3)^2 + (y-1)^2 = 9$

27. $\frac{(x+6)^2}{25} + \frac{(y+3)^2}{4} = 1$