

# Answer Key

## Practice C

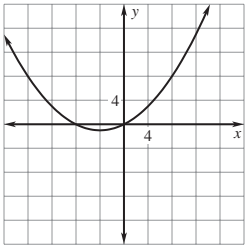
1.  $(x + 5)^2 + (y + 3)^2 = 2$

2.  $(x - 4)^2 = -8(y + 1)$

3.  $\frac{(x - 2)^2}{4} + \frac{(y + 2)^2}{9} = 1$

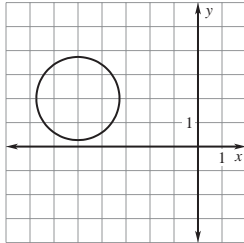
4.  $\frac{(x - 3)^2}{1} - \frac{(y - 3)^2}{9} = 1$

5.



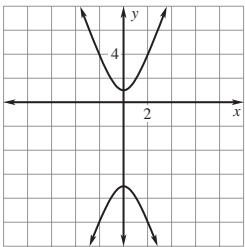
vertex:  $(-4, -1)$ ;  
focus:  $(-4, 3)$

6.



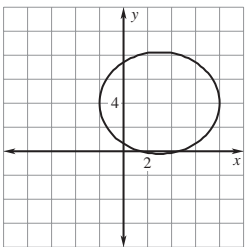
center:  $(-5, 2)$ ;  
radius:  $\sqrt{3}$

7.



center:  $(0, -3)$ ;  
vertices:  $(0, 1), (0, -7)$ ;  
foci:  $(0, -3 + 3\sqrt{2}),$   
 $(0, -3 - 3\sqrt{2})$

8.

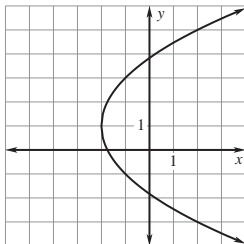


center:  $(3, 4)$ ;  
vertices:  $(8, 4), (-2, 4)$ ;  
foci:  $(3 + \sqrt{7}, 4),$   
 $(3 - \sqrt{7}, 4)$

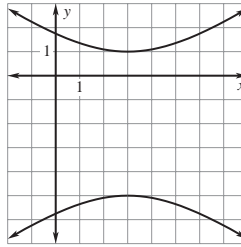
9. hyperbola 10. ellipse 11. ellipse

12. circle 13. hyperbola 14. parabola

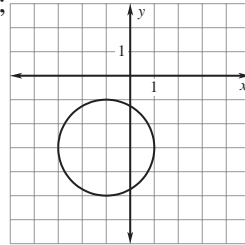
15.  $(y - 1)^2 = 4(x + 2)$



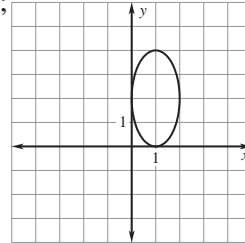
16.  $\frac{(y + 2)^2}{9} - \frac{(x - 3)^2}{16} = 1$ ;



17.  $(x + 1)^2 + (y + 3)^2 = 4$ ;



18.  $(x - 1)^2 + \frac{(y - 2)^2}{4} = 1$ ;



19.  $\frac{x^2}{100^2} + \frac{(y - 85)^2}{85^2} = 1$ ;  $8500\pi \text{ yd}^2$