

# Answer Key

## Practice B

1.  $\frac{x^2}{25} - \frac{y^2}{4} = 1$     2.  $\frac{y^2}{64} - \frac{x^2}{4} = 1$

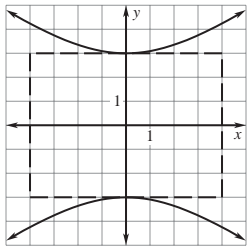
3.  $\frac{x^2}{16} - \frac{y^2}{9} = 1$

4. vertices:  $(\pm 9, 0)$ ; foci:  $(\pm 3\sqrt{13}, 0)$

5. vertices:  $(\pm 6, 0)$ ; foci:  $(\pm 2\sqrt{10}, 0)$

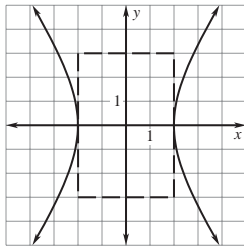
6. vertices:  $(0, \pm 3)$ ; foci:  $(0, \pm \sqrt{109})$

7.



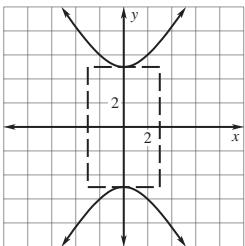
foci:  $(0, \pm 5)$ ;  
asymptotes:  $y = \pm \frac{3}{4}x$

8.



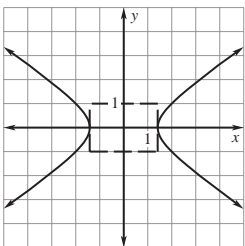
foci:  $(\pm \sqrt{13}, 0)$ ;  
asymptotes:  $y = \pm \frac{3}{2}x$

9.



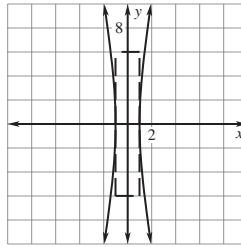
foci:  $(0, \pm \sqrt{34})$ ;  
asymptotes:  $y = \pm \frac{5}{3}x$

10.



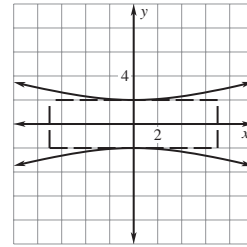
foci:  $(\pm \sqrt{3}, 0)$ ;  
asymptotes:  
 $y = \pm \frac{\sqrt{2}}{2}x$

11.



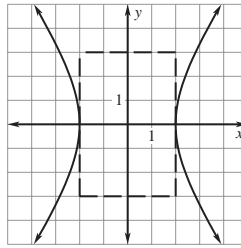
foci:  $(\pm \sqrt{37}, 0)$ ;  
asymptotes:  $y = \pm 6x$

12.

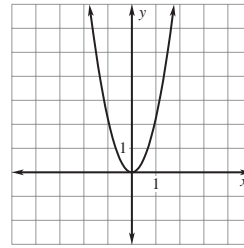


foci:  $(0, \pm \sqrt{53})$ ;  
asymptotes:  $y = \pm \frac{2}{7}x$

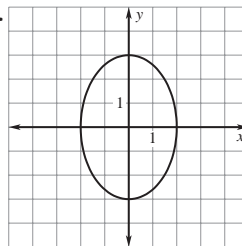
13.



14.



15.



16.  $\frac{x^2}{9} - \frac{y^2}{72} = 1$

17.  $\frac{x^2}{9} - \frac{y^2}{40} = 1$

18.  $\frac{y^2}{9} - x^2 = 1$

19.  $\frac{x^2}{64} - y^2 = 1$     20.  $\frac{R^2}{\frac{16}{\pi}} - \frac{r^2}{\frac{8}{\pi}} = 1$