

Answer Key

Practice C

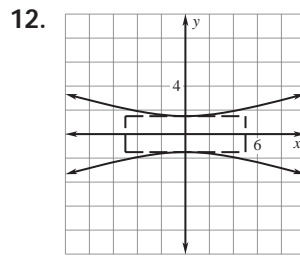
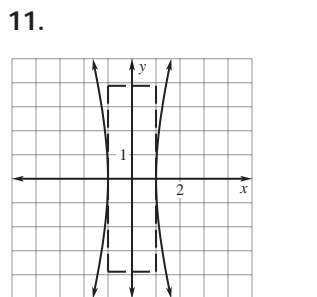
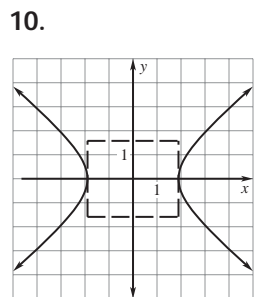
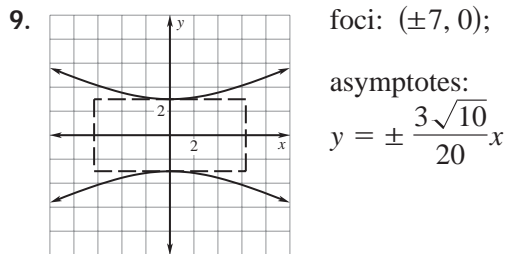
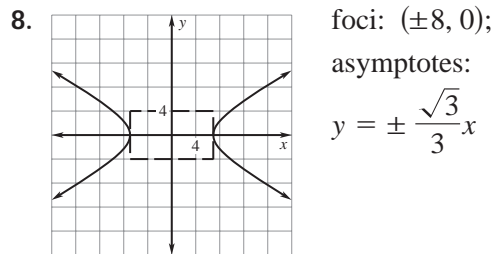
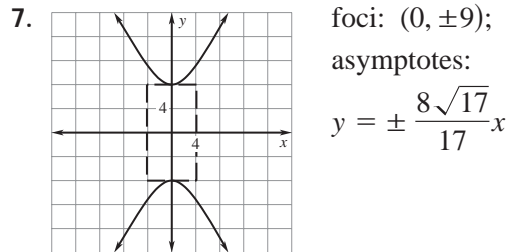
1. $\frac{y^2}{100} - \frac{x^2}{4} = 1$ 2. $\frac{x^2}{4} - \frac{y^2}{49} = 1$

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

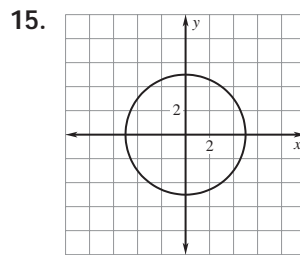
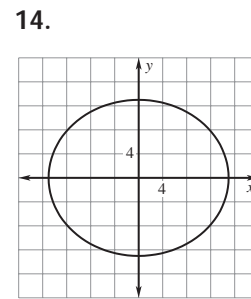
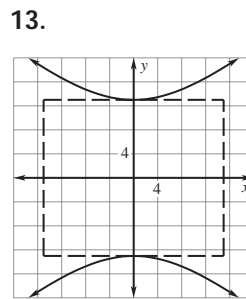
4. vertices: $(\pm 4, 0)$; foci: $(\pm 2\sqrt{5}, 0)$

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

6. vertices: $(\pm 5\sqrt{3}, 0)$; foci: $(\pm 5\sqrt{7}, 0)$



foci: $(0, \pm \frac{\sqrt{109}}{2})$;
asymptotes: $y = \pm \frac{3}{10}x$



16. $\frac{x^2}{4} - \frac{y^2}{21} = 1$

17. $y^2 - \frac{x^2}{48} = 1$

18. $\frac{y^2}{16} - \frac{x^2}{15} = 1$

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

20. $\frac{x^2}{50} - \frac{y^2}{225} = 1$; about 15.8 m