[1] 1,110,000

[2] 259,459,200

[3] $5+i$

[4] $\dfrac{-7 \pm \sqrt{69}}{10}$

[5] $8^{\frac{2}{3}} = 4$

[6] $\log_4 1024 = 5$

[7] 4

[8] 6.90

[9] $-\dfrac{3}{4}$

[10] $-(x+4)$

[11] $\dfrac{1}{2-x}$

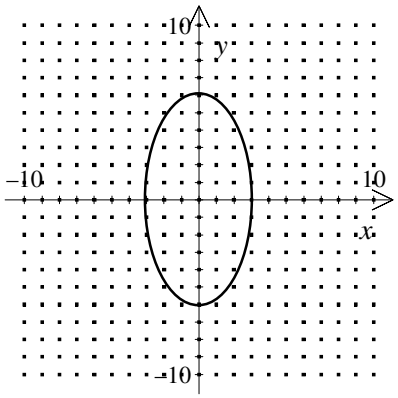
[12] $\dfrac{x-8}{x+3}$

[13] no solution

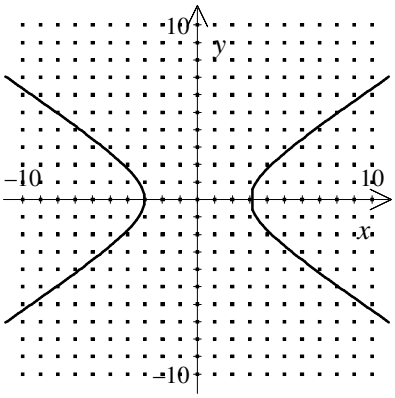
[14] $y = \dfrac{1}{20}x^2$

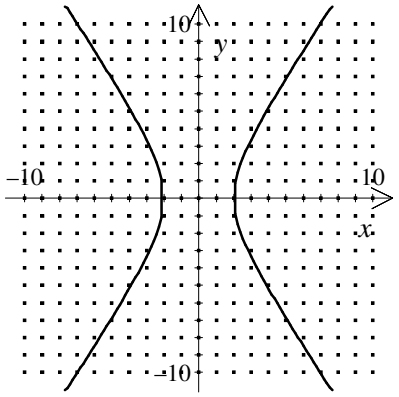
[15] $(x-5)^2+(y+3)^2 = 36$

[16] $\dfrac{x^2}{89} + \dfrac{y^2}{64} = 1$

[17] 

[18] (0, ±6.0)

[19] 

[20] 

[21] vertices: $\left(\pm\frac{1}{4}, 0\right)$, asymptotes: $y = \pm 8x$, foci: $\left(\pm\frac{1}{4}\sqrt{65}, 0\right)$

[22] $\frac{(x-7)^2}{2} - \frac{(y+1)^2}{3} = 1$; The figure is a hyperbola.

[23] center $(-4, 1)$; $r = 3$

[24] $\frac{1}{6}$

[25] -338

[26] $\frac{2}{243}$

[27] $\frac{100}{3}$

[28] $\frac{1}{9}$