

[1] B

[2] B

[3] $5x^2 - 13 + \frac{30}{x^2 + 2}$

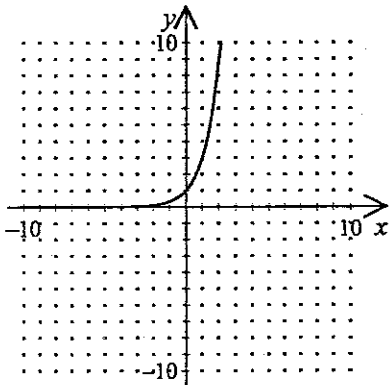
[4] 1, 2, -2

[5] $\frac{1}{2}, \pm\sqrt{5}$

[6] $-1, 1, \frac{1}{3}, \frac{3}{2}$

[7] B

[8] $y = \frac{x-4}{5}$



[9]

($x = 2$)
 Volume = 120
 length = 10
 width = 6
 height = 2

[10]

[11] \$1967.15

[12] \$1819.40

[13] A

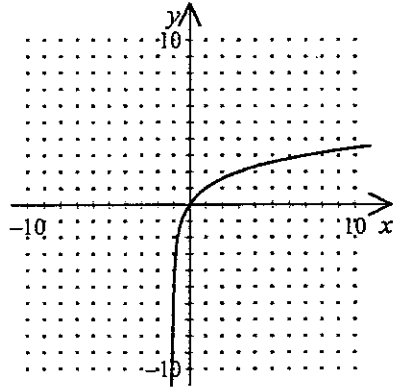
[14] \$5,000,000

[15] $f(x) = 250(0.91)^x; 156$

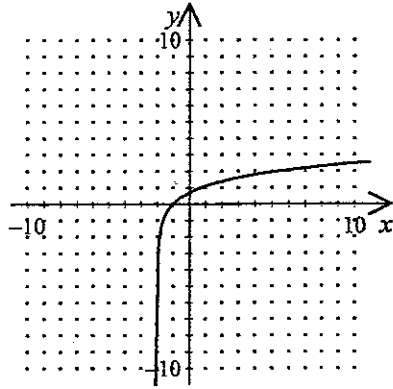
[16] \$27,091

[17] $243^{3/5} = 27$

[19] 4



[20] Domain: $\{x|x > -1\}$; Range: all real numbers



[21] Domain: $\{x|x > -2\}$; Range: all real numbers

[22] $\frac{\log 5}{\log 3} \approx 1.46$

[23] $\log_7 x + \log_7(x + 4) - 6\log_7 x$

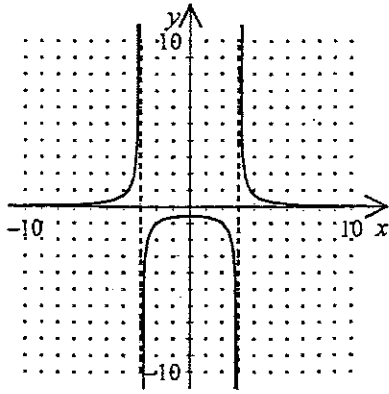
[24] $\log_5 \frac{4y^4}{x^3}$

[25] -0.3402

[26] $x = 36$

[27] C

[28] $x = 2.513$



[29] _____

[30] $x = 2, x = -2, y = 1$

[31] $\sqrt{2}$

[32] $\frac{1}{2}$

[33] $\frac{7}{25}$

[34] C

[35] 16.57 ft

[36] $\frac{1}{3}\pi$

[37] 117°

[38] 67°

[39] D

[40] $-\frac{1}{\sqrt{2}}$

[41] A

[42] 7.65 cm^2

[43] 12.69

Amplitude: 3

[44] Period: 1

[45] $y = \frac{2}{3}\sin\left(\frac{\pi x}{6}\right)$

[46] C

[47] $y = 4 + \sin\left(x + \frac{\pi}{2}\right)$

$\cos \theta = -\frac{\sqrt{65}}{9}; \tan \theta = -\frac{4\sqrt{65}}{65}; \cot \theta = -$

[48] $\frac{\sqrt{65}}{4}; \sec \theta = -\frac{9\sqrt{65}}{65}; \csc \theta = \frac{9}{4}$

[49] $70.53^\circ, 289.47^\circ$

$0.5x^3 + 0.4x^2 - 0.5x - 0.5$

[50] 707.9 thousand

[51] C

1) $\langle -7, -5 \rangle$

2) 8.6

3) C

4) A

5) D

6) B

7) A

8) D

9) C

