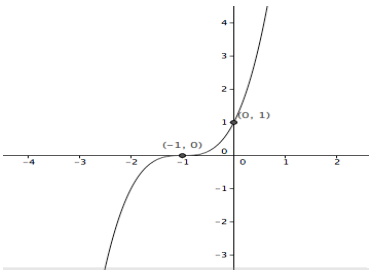
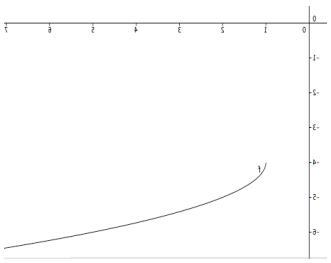
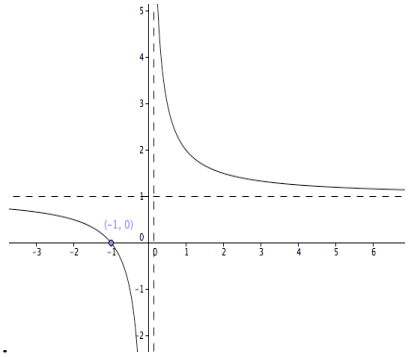
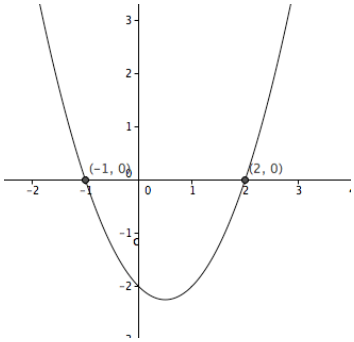
PreCalculus Review Answers

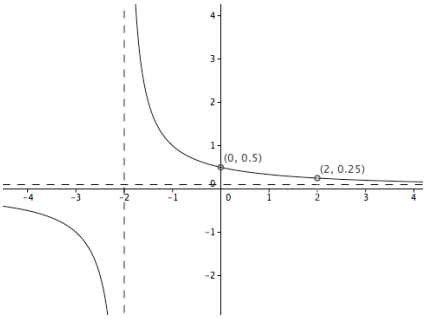
Selected graphs

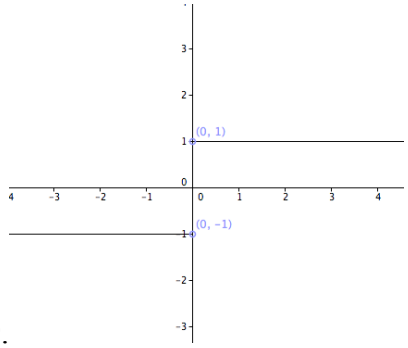
1. 

2. 

3. 

6. 

8. 

9. 

	Domain	Range
1.	$(-\infty,\infty)$	$(-\infty,\infty)$
2.	$[1,\infty)$	$(-\infty,-4]$
3.	$(-\infty,0)\cup(0,\infty)$	$(-\infty,1)\cup(1,\infty)$
4.	$(-\infty,\infty)$	$(-\infty,1]\cup(1,\infty)$
5.	$(0,\infty)$	$(-\infty,\infty)$
6.	$(-\infty,\infty)$	$[-9/4,\infty)$
7.	$(-\infty,\infty)$	$(0,\infty)$
8.	$(-\infty,-2)\cup(-2,2)\cup(2,\infty)$	$(-\infty,0)\cup(0,1/4)\cup(1/4,\infty)$
9.	$(-\infty,0)\cup(0,\infty)$	Set Notation: $\{y \mid y = -1, 1\}$

10. $\left\{\frac{-2\pm\sqrt{2}}{2}\right\}$

11. $\left\{-2,\frac{1}{2},3\right\}$

12. $x=4$

13. $\left\{-2,1\pm\sqrt{7}\right\}$

14. x = -1

15. $\{-3,4\}$

16. x = 6

17. $x = e^2 - 1$

18. $\{-60,68\}$

19. $\left[-4,\frac{2}{3}\right]$

20. $\left(-\infty,-\frac{1}{2}\right)\cup\left(\frac{1}{3},\infty\right)$

21. $\frac{5x-2}{2x(x+2)}$

22. $x^2-2x+3-\frac{7}{x+2}$

23. $x(x+3)(x^2-3x+9)$

24. $x(2x-3)(x+4)$

25. $-2(x+4)(x+10)$

26. $3x^{-1/2}(x-2)(x-1)$

27. $(x+5)^{-3/2}(x+4)$

28. 267, -267, odd

29. 2, 2, even

30. $3\sqrt{11}$, $-3\sqrt{11}$, odd

31. -5/7

32. 1/13

33. 2

34. $\frac{-1}{x(x+h)}$

35. $y-5=\frac{1}{3}(x-3);\ y=\frac{1}{3}x+4$

36. $y+3=-\frac{7}{3}(x-2);\ y=-\frac{7}{3}x+\frac{5}{3}$

37. $y-2=-\frac{1}{3}(x-5);\ y=-\frac{1}{3}x+\frac{11}{3}$

38. $y-4=8(x-0);\ y=8x+4$

39. (1, 4)

40. (7/25, -1/25)

41. $\frac{1}{2}\log x+3\log y-3\log z-2$

42. $\frac{3}{5}+\frac{2}{5}\ln x+\frac{4}{5}\ln y$

43. 5

44. $\ln(x^3(x-3))$

45. $-\sqrt{2}$

46. $-\frac{2\sqrt{3}}{3}$

47. $-\frac{\sqrt{3}}{3}$

48. $2\pi/3$

49. $\pi/4$

50. $-\pi/3$

51. 4/5

52. 2

53. $\left\{\frac{\pi}{2},\frac{7\pi}{6},\frac{11\pi}{6}\right\}$

54. $x=\pi$

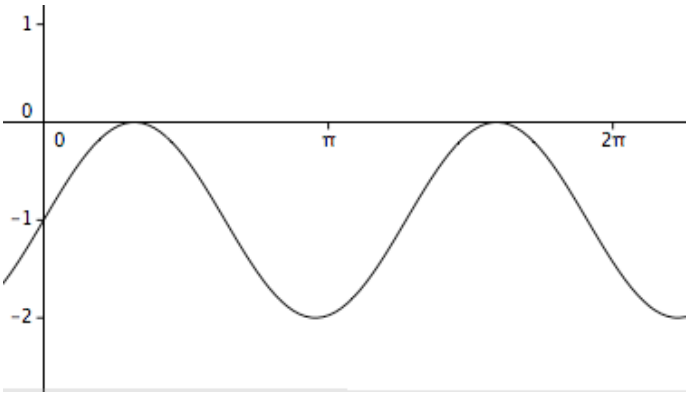
55. $\left\{\frac{\pi}{6},\frac{\pi}{2},\frac{5\pi}{6},\frac{3\pi}{2}\right\}$

56. $\left\{\frac{7\pi}{12},\frac{11\pi}{12},\frac{19\pi}{12},\frac{23\pi}{12}\right\}$

57. $\cos\theta$

58. $\sin\theta$

59. Domain: $(-\infty,\infty)$



60. $\left(\frac{\pi(2k-1)}{2},\frac{\pi(2k+1)}{2}\right),k\varepsilon Z$