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2. (3, -9.7)

4. $f(-3) = 2$

26a. $f(-2) = \sqrt{3}$
 $f(a+2) = \sqrt{-1-a}$

26b. $x \leq 1$

28a. $f(-1) = -2$

$f(a) = \frac{3a-5}{a+5}$

28b. $x \neq -5$

29a. $f(6) = -7 f(a-1) = -7$

29b. All real numbers

36a. $f(0)$ is undefined

$f(a^2 - a + 1) = \frac{1}{\sqrt{a^2 - a}}$

36b. $x > 1$

64. verbal: multiply the input by 2 then subtract 5
 numerical:

x	-2	-1	0	1	2
y	-9	-7	-5	-3	-1

70. verbal: square the input and subtract 1
 numerical:

x	-2	-1	0	1	2
y	3	0	-1	0	3

Graphical:

78. Yes it is a function, Domain and Range is all real numbers.

80. Yes it is a function, $D = \{x | -5 \leq x \leq 5\}$ $R = \{y | -1 \leq y \leq 1\}$

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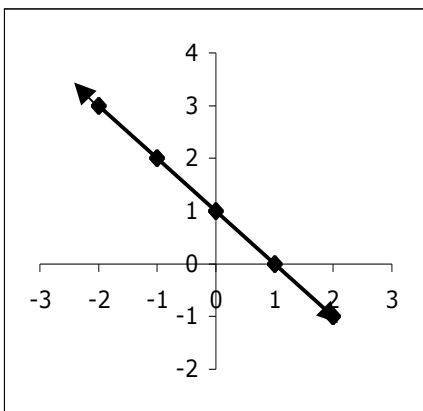
15. Not a function

16. A function

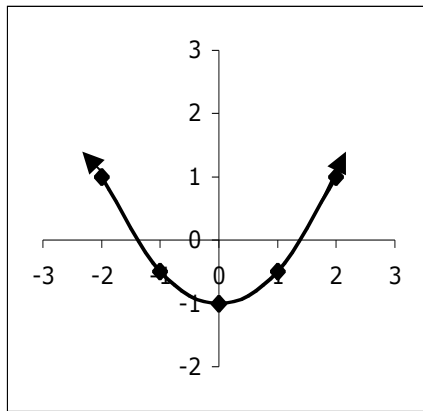
24. $D = \{x | -2 \leq x \leq 2\}$ $R = \{y | -2 \leq y \leq 0\}$ $f(-2) = 0$

24b. $D =$ all real numbers; $R = \{y | y \leq 2\}$; $f(-2) = 2$

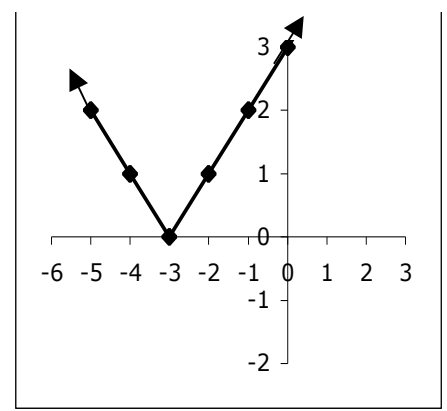
27.



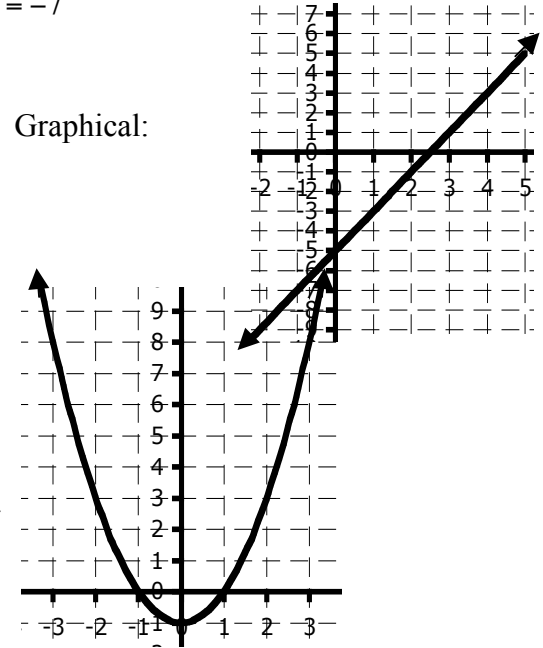
30.



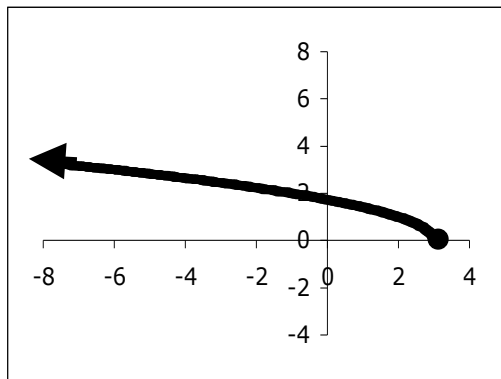
31.



Graphical:



32.



33. $f(x) = 16x$

34. $f(x) = x^2$

35a. $f(-8) = -2,$
 $f(1) = 1$

35b. All real numbers

36a. $f(-2) = -4$
 $f(5) = 17$

36b. All real numbers

37a. $f(-3) = 5$
 $f(1.5) = 5$

37b. All real numbers

38a. $f(-5) = 29$
 $f(6) = -26$

38b. All real numbers

39a. $f(-10) = 97$
 $f(a+2) = a^2 + 4a + 1$

39b. All real numbers

40a. $f(-10) = -970$

$f(a+1) = a^3 + 3a^2 - 2$

40b. All real numbers

42a. $f(1) = 2$

$f(a-3) = \sqrt{a}$

42b. $D = \{x | x \geq -3\}$

45. Yes, it is a function

46. No, it is not a function.

47. Yes, it is a function.

48. No, it is not a function.

49. $m = 0$

50. $m = 1/3$

51. $m = -3/4$

52. $m = 14$

53. $m = 0$

54. The slope is undefined.

55. Linear

56. Nonlinear

57. Nonlinear

58. Constant and linear

59. See answer on page A-6 of text book.

68a. 140 mi

68b. -70 The driver is moving toward the rest stop at 70 miles per hour.

70a. Taking zero credits would cost \$0

70b. $m = 100$

70c. The cost per credit is \$100