

HW40

p194

7. yes

8. no (-1)

9. no

10. yes

11. yes

12. no (1)

13. no (7)

14. yes

$$\text{ii } 19. \quad y^2 = 4 - x^2$$

$$y = \pm \sqrt{4 - x^2}$$

no

$$20. \quad -y^2 = 16 - x^2$$

$$y^2 = -16 + x^2$$

$$y = \pm \sqrt{16 + x^2}$$

no

21. $y = 4 - x^2$ yes

22. $y = 36 + 4x^2$ yes

35. $y = -5$ yes

36. $x = 1$ no

37. (a) $f(1) = 2(1) - 3$
 $= -1$

(b) $f(-3) = 2(-3) - 3$
 $= -9$

(c) $f(x-1) = 2(x-1) - 3$
 $= 2x - 5$

38. (a) $g(0) = 7 - 3(0)$
 $= 7$

(b) $g(7/3) = 7 - 3(7/3)$
 $= 0$

(c) $g(s+2) = 7 - 3(s+2)$
 $= -3s + 1$

51. (a) $f(-2) = 3(-2) - 1$
 $= -7$

(b) $f(-1/2) = 4$

(c) $f(3) = 3^2$
 $= 9$

52. (a) $f(-3) = 4 - 5(-3)$
 $= 19$

(b) $f(4) = 16 + 1$
 $= 17$

(c) $f(-1) = 0$

40. $0 = 5x + 1$
 $-1 = 5x$
 $\boxed{-1/5 = x}$

43. $0 = x^2 - 9$
 $9 = x^2$
 $\boxed{\pm 3 = x}$

41. $\frac{3x-4}{5} = 0$

$3x - 4 = 0$
 $3x = 4$

$\boxed{x = 4/3}$

42. $0 = 12 - x^2$
 $x^2 = 12$
 $\boxed{x = \pm 2\sqrt{3}}$