

## HW 26

p117

39.  $(x^2 + 4x + 4) - 4 - 32 = 0$

$(x+2)^2 - 36 = 0$

$(x+2)^2 = 36$

$x+2 = \pm 6$

$x = -2 \pm 6$

$$\boxed{\begin{array}{l} x = 4 \\ x = -8 \end{array}}$$

40.  $(x^2 - 2x + 1) - 1 - 3 = 0$

$(x-1)^2 - 4 = 0$

$(x-1)^2 = 4$

$x-1 = \pm 2$

$x = 1 \pm 2$

$$\boxed{\begin{array}{l} x = 3 \\ x = -1 \end{array}}$$

41.  $(x^2 + 6x + 9) - 9 + 2 = 0$

$(x+3)^2 - 7 = 0$

$(x+3)^2 = 7$

$x+3 = \pm \sqrt{7}$

$$\boxed{x = -3 \pm \sqrt{7}}$$

42.  $(x^2 + 8x + 16) - 16 + 14 = 0$

$(x+4)^2 - 2 = 0$

$(x+4)^2 = 2$

$x+4 = \pm \sqrt{2}$

$$\boxed{x = -4 \pm \sqrt{2}}$$

105.  $(x^2 - 2x + 1) - 1 - 1 = 0$

$(x-1)^2 - 2 = 0$

$(x-1)^2 = 2$

$x-1 = \pm \sqrt{2}$

$$\boxed{x = 1 \pm \sqrt{2}}$$

106.  $11x(x+3) = 0$

$11x = 0 \quad x+3 = 0$

$$\boxed{x = 0} \quad \boxed{x = -3}$$

107.  $x+3 = \pm 9$

$x = -3 \pm 9$

$$\boxed{\begin{array}{l} x = 6 \\ x = -12 \end{array}}$$

108.  $(x-7)(x-7) = 0$

$$\boxed{x = 7}$$