

69 $\sqrt{x+2} = x-4 \Rightarrow x+2 = x^2 - 8x + 16 \Rightarrow x^2 - 9x + 14 = 0 \Rightarrow (x-2)(x-7) = 0 \Rightarrow x = 2 \text{ or } 7.$

(Note that 2 is not a solution.) **Check:** $\sqrt{2+2} = 2 \neq 2-4$; $\sqrt{7+2} = 3 = 7-4$. The only solution is $x = 7$.