Correct. Use FOIL and simplify:

$$\left(\sqrt{a} - 2\right)\left(\sqrt{a} + 4\right) = \left(\sqrt{a}\right)\left(\sqrt{a}\right) + \left(\sqrt{a}\right)(4) - (2)\left(\sqrt{a}\right) - (2)(4)$$

$$= \sqrt{a^2} + 4\sqrt{a} - 2\sqrt{a} - 8 = |a| + 2\sqrt{a} - 8$$