

Let

$$\sqrt{B+\sqrt{C}} = \sqrt{F} + \sqrt{G}$$

Then, ASSUME $G \geq F$,

$$F = \frac{B - \sqrt{B^2 - C}}{2}$$

$$G = \frac{B + \sqrt{B^2 - C}}{2}$$

EXAMPLE

$$A_1 = \sqrt{3 + \sqrt{5}} \approx 2.29$$

$$F_1 = \frac{3 - \sqrt{3^2 - 5}}{2} = \frac{3 - 2}{2} = \frac{1}{2}$$

$$G_1 = \frac{3 + 2}{2} = \frac{5}{2}$$

$$\sqrt{\frac{1}{2}} + \sqrt{\frac{5}{2}} \approx 2.29 \text{ CHECK.}$$