

$$2 = a + d + e + h$$

$$\geq 2\sqrt{ah} + d + e,$$

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$$\geq 2.$$

$$\left[\text{since } a + h \geq 2\sqrt{ah} \right]$$

$$\left[\text{since } ah \geq 1 \right]$$

$$\left[\text{since } e \geq 0, \ ; d \geq 0 \right]$$