Hol a hiba?

I.

$$16 - 36 = 25 - 45$$

$$16 - 4 \cdot 9 = 25 - 5 \cdot 9$$

$$16 - \frac{2 \cdot 4 \cdot 9}{2} = 25 - \frac{2 \cdot 5 \cdot 9}{2}$$

$$4^2 - 2 \cdot 4 \cdot \frac{9}{2} + \left(\frac{9}{2}\right)^2 = 5^2 - 2 \cdot 5 \cdot \frac{9}{2} + \left(\frac{9}{2}\right)^2$$

$$\left(4 - \frac{9}{2}\right)^2 = 5 - \left(\frac{9}{2}\right)^2$$

$$4 - \frac{9}{2} = 5 - \frac{9}{2}$$

$$4 = 5.$$

II.

$$\log \frac{1}{2} = \log \frac{1}{2}$$

$$3 > 2$$

tehát

$$3 \log \frac{1}{2} > 2 \log \frac{1}{2}$$

s így

$$\left(\frac{1}{2}\right)^3 > \left(\frac{1}{2}\right)^2$$

vagy

$$\frac{1}{8} > \frac{1}{4}.$$