

Calculations by Coffey...

$$\frac{l}{h} = 2.3 \left(\frac{v^2}{gh} \right)^{0.3}$$

$$g = 9.8 \text{ m/sec}^2$$

$v = \text{velocity}$

$$\frac{\frac{l}{h}}{2.3} = \frac{\left(\frac{v^2}{gh} \right)^{0.3}}{0.3}$$

$$\frac{l}{2.3h} = \left(\frac{v^2}{gh} \right)^{0.3}$$

$$l (gh)^{0.3} = 2.3h (v^2)^{0.3}$$

$$\frac{l (gh)^{0.3}}{2.3h} = \frac{2.3h (v^2)^{0.3}}{2.3h}$$

$$\frac{l (g^{0.3}) (h^{0.3})}{2.3h} = (v^2)^{0.3}$$

$$\frac{1}{l} \cdot \frac{l (g^{0.3}) (h^{0.3})}{2.3h} = \frac{1}{l} (v^2)^{0.3}$$

$$\frac{g^{0.3} h^{0.3}}{2.3h} = \frac{1}{l} (v^2)^{0.3}$$

$$\frac{1}{g^{0.3}} \cdot \frac{g^{0.3} h^{0.3}}{2.3h} = \frac{1}{g^{0.3}} \left(\frac{1}{l} \right) (v^2)^{0.3}$$

$$\frac{h^{0.3}}{2.3h} = \frac{1}{g^{0.3}} \left(\frac{1}{l} \right) (v^2)^{0.3}$$

$$\frac{2.3}{1} \cdot \frac{h^{0.3}}{2.3h} = 2.3 \left(\frac{1}{g^{0.3}} \right) \frac{1}{l} (v^2)^{0.3}$$

$$\frac{h^{0.3}}{h} = \frac{2.3}{g^{0.3} l} (v^2)^{0.3}$$