

$$H = \frac{gt^2}{2}$$

$$v = gt, t = \frac{v}{g};$$

$$H = \frac{g \frac{v^2}{g^2}}{2} = \frac{v^2}{2g}$$

As acceleration of free falling does not depend on weight, balls will rise on equal altitude:

$$H_1 = H_2, \text{ ratio} = \frac{H_1}{H_2} = 1$$

Answer:

Ratio = 1.