Exemplo

$$0 = R \tan(\phi_0) - \frac{g}{2} \frac{R^2}{(v_o \cos(\phi_0))^2}$$
$$\frac{g}{2} \frac{R^2}{(v_o \cos(\phi_0))^2} = R \tan(\phi_0)$$
$$\frac{g}{2} \frac{R}{(v_o \cos(\phi_0))^2} = \frac{\sin(\phi_0)}{\cos(\phi_0)}$$
$$R = \frac{2}{g} v_o^2 \cos^2(\phi_0) \frac{\sin(\phi_0)}{\cos(\phi_0)}$$
$$R = \frac{2v_o^2}{g} \cos(\phi_0) \sin(\phi_0)$$

Data: 14/04/2023