

$$U_{10} = \frac{M(g),0}{h_g \cdot \cos \beta_{10}}$$

$$\tan \beta_{10} = \frac{5}{5} = 1$$

$$h_g = 10 + 5 \cdot \frac{5}{25} = 11$$

$$\cos \beta_{10} = \frac{\sqrt{2}}{2}$$

$$U_{10} = M(g),0 \cdot \frac{2}{\sqrt{2}} \cdot \frac{1}{11} = \frac{2}{11\sqrt{2}} M(g),0$$

$$b) U_g = \dots \quad \sum M(g) = 0$$

$$M(g),0 - U_g \cdot h_g \cdot \cos \beta_g - H \cdot y(g) = 0$$

$$U_g = \frac{1}{\cos \beta_g} \left(\frac{M(g),0}{h_g} - H \cdot \frac{y(g)}{h_g} \right)$$

$$U_g = \frac{2}{\sqrt{2}} \left(\frac{M(g),0}{11} - H \right)$$

$$U_g = \frac{2}{11\sqrt{2}} M(g),0 - \frac{2}{\sqrt{2}} H$$

$$\tan \beta_g = \frac{5}{5} = 1$$

$$\cos \beta_g = \frac{\sqrt{2}}{2}$$

$$h_g = 11$$

$$y(g) = h_g = 11$$

$$\sin \beta_{10} = \frac{\sqrt{2}}{2} \quad \sin \beta_g = \frac{\sqrt{2}}{2}$$

$$V_g = -V_B' - \frac{2}{11\sqrt{2}} \cdot \frac{\sqrt{2}}{2} \cdot M(g),0 - \frac{2}{11\sqrt{2}} \cdot \frac{\sqrt{2}}{2} M(g),0 + \frac{2}{\sqrt{2}} \cdot \frac{\sqrt{2}}{2} H - H \cdot \frac{1}{8}$$

$$V_g = -V_B' - \frac{2}{11} M(g),0 + \frac{7}{8} H$$