22. We use Eq. 4-26

$$R_{\max} = \left(\frac{v_0^2}{g}\sin 2\theta_0\right)_{\max} = \frac{v_0^2}{g} = \frac{(9.5\,\mathrm{m/s})^2}{9.80\,\mathrm{m/s^2}} = 9.21\ \mathrm{m}$$

to compare with Powell's long jump; the difference from $R_{\max}$ is only $\Delta R = 9.21 - 8.95 = 0.26$ m.