Answer on Question #69583-Physics-Other

If the acceleration under gravity (g) is 9.80 m/s2, how many g would you experience if you were fired from Mr. Verne's Moon Cannon?

Humans can stand 15g for a short time and have been known to take momentary accelerations of 46g.

Solution

$$\frac{a}{g} = \frac{136750\frac{m}{s^2}}{9.80\frac{m}{s^2}} = 13950.$$

Thus,

$$a = 13950g.$$