

$$H_{max} = \frac{V^2}{2g} - \text{max height},$$

where

V – initial speed

$$t_1 = \frac{V}{g}$$

$$t_2 = \sqrt{\frac{2H_{max}}{g}} = \frac{V}{g}$$

$t = t_1 + t_2$ – Total time of flight

$$t = \frac{2V}{g}$$

$t^* = 1 + 1 + 1 = 3 \text{ sec}$ – Time to cast 3 bricks

$t > t^*$

$$\frac{2V}{g} > 3$$

$$2V > 30$$

ANSWER:

$$V > 15 \text{ m/s}$$