

2. A ball is thrown vertically upwards with a speed V m/s.

The height, H metres, to which it rises is given by

$$H = \frac{V^2}{2g}$$

where g m/s² is the acceleration due to gravity.

$V = 24.4$ correct to 3 significant figures.

$g = 9.8$ correct to 2 significant figures.

(i) Write down the lower bound of g .

peed V metres per second.

given by

vity.

- (ii) Calculate the upper bound of H .
Give your answer correct to 3 significant figures.

$$H = \frac{24.45^2}{2 \times 9.75}$$
$$H = 30.6565$$

9.75

ant figures.

30.7