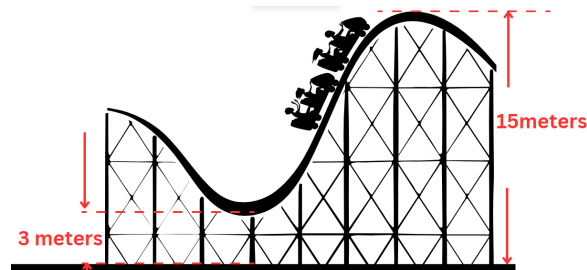


## roller coaster b



### Question

with the same givens from the previous question. Will the roller coaster make it to the highest point on the track?

*Using known expressions:*

$$p(\text{at the highest point}) = mgh$$

*Given:*

$$U = 150,000 + 1500 * 3 * 9.81 = 194 \text{ KJ}$$

$$M = 1500 \text{ kJ}$$

*Solution:*

$p = 1,500 * 9.81 * 15 = 221 \text{ KJ}$  which is higher than the total energy so it will not make it