

A free body diagram showing four vectors originating from the same point. A vertical line extends upwards through a small black dot. At the top of this line is a large upward-pointing arrow labeled F_N . At the bottom of the line is a large downward-pointing arrow labeled mg . To the right of the line is a vertical vector labeled v , pointing downwards. To the right of v is another vertical vector labeled a , pointing upwards.

v

a

mg