

# 5)

A mass is released, moving upwards with velocity  $V_0$ . It is acted on by gravity and by air friction, which is here assumed to have a magnitude " $b v$ " for some constant " $b$ ".

(In reality this is only ~~not~~ valid for very low velocities)

Which one of the following is correct?

- [A] The velocity of the rock is  $V_0$  when it returns to its original position on the way down.
- [B] The magnitude of the acceleration is always greater than " $g$ ".
- [C] The acceleration is equal to " $g$ " only at the top of its flight.