

In a moment of boredom, I buy a Samick Sage Takedown bow on Amazon (#1 best seller), and **I fire an arrow straight up** (this is a bad idea, don't do this). At the instant the arrow leaves the bow, it is traveling **125mph**.

Which statement is most accurate?

- (a) After **1 hour**, the arrow will be **125 miles** up.
- (b) After **.1 hours**, the arrow will be $.1 \times 125 = \mathbf{12.5 \text{ miles}}$ up.
- (c) After **.00001 hours** (about .03 seconds), the arrow will be $00001 \times 125 = \mathbf{.00125 \text{ miles}}$ up (about 6 feet).
- (d) In any single instant, the arrow is in only one place, so it is not moving. So in 1 hour, it will still be in the same place.