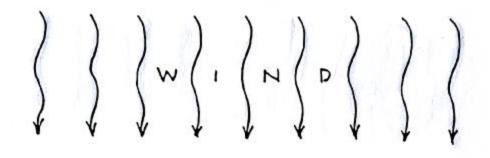
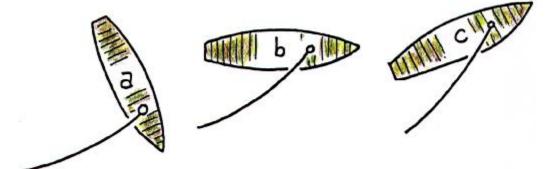
We all know that the force of wind impact drives a sailboat. In which of the three positions does the wind impact force actually increase as the boat moves faster?

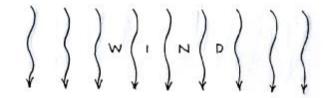


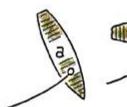


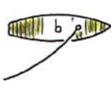


CONCEPTUAL Physics

We all know that the force of wind impact drives a sailboat. In which of the three positions does the wind impact force actually increase as the boat moves faster?









Answer: Boat c

Just as raindrops hit you harder the faster you run into a slanting rain, the wind impact increases for Boat c that angles into the wind. This is the main reason that, a sailcraft attains maximum speed when directed at an angle upwind rather than crosswind or downwind. It can't sail directly upwind, but it can sail to a destination upwind by zig-zagging back and forth. This is called tacking.



CONCEPTUAL Physics

Jant!