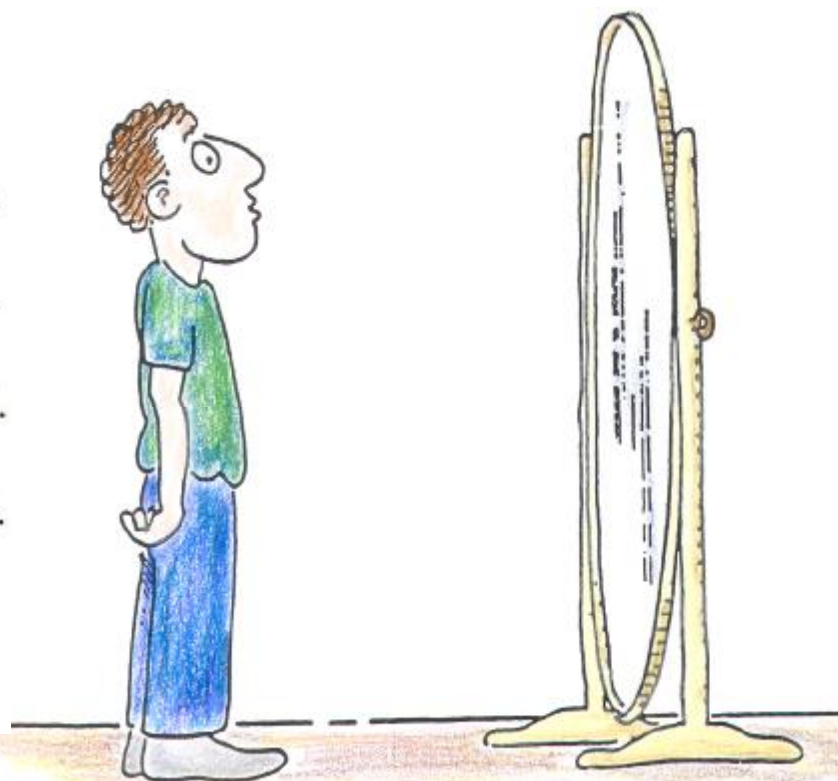


## NEXT-TIME QUESTION

In order that you are able to see a full-length view of yourself, the minimum size for a plane mirror must be

- a)  $1/4$  your height.
- b)  $1/2$  your height.
- c)  $3/4$  your height.
- d) your full height.
- e) ... depends on your distance.



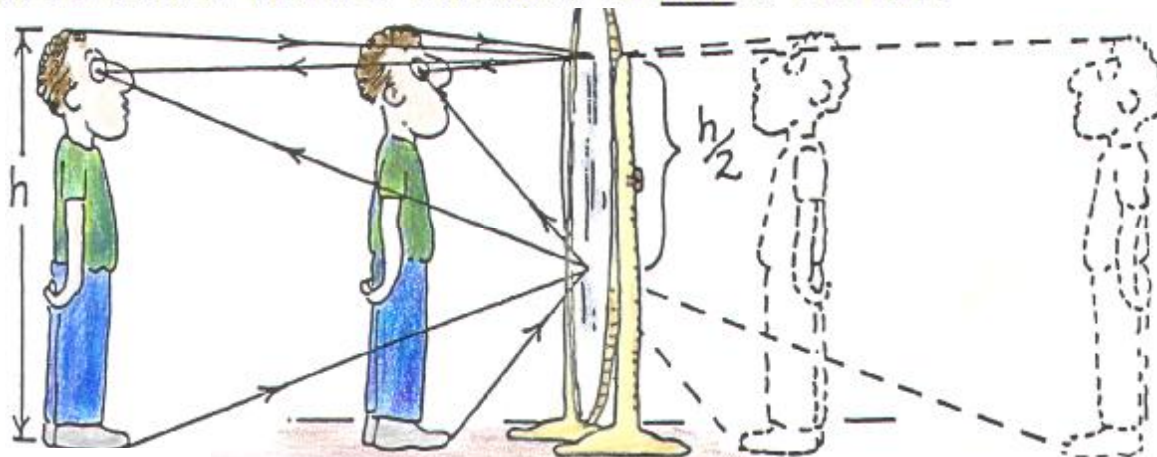
# NEXT-TIME QUESTION

In order that you are able to see a full-length view of yourself, the minimum size for a plane mirror must be

- a)  $1/4$  your height.
- b)  $1/2$  your height.
- c)  $3/4$  your height.
- d) your full height.
- e) ... depends on your distance.

Answer: b,  $1/2$  your height

Consistent with the law of reflection, if you look halfway down a plane mirror in front of you, you'll see your toes. If you look at parts of the mirror below the halfway mark, you'll see the floor but not yourself. If you look straight ahead, you'll see your eyes. If you look above at a distance halfway from your eyes to the top of your head, you'll see the top of your head. You don't see your image in parts of the mirror above. Halfway up; halfway down—that's a mirror one-half your height. As the sketch below shows, distance is not a factor.



Hewitt  
Drewit!