Question #286

This question will be a follow-up to Question #285.

Part 1:

If the eye is too long, as seen in the photograph model at the left below by moving the retina to the right in the model (back of the tank), the image will not be in focus. This is seen in the photograph at the center, with the reflection of the object and the unfocused retinal image, and the close-up of the unfocused image seen at the right below.



What must be done to resolve this problem in a real eye, so that the image is moved to the plane of the retina:

- (a) You must use a positive (convex) eyeglass lens.
- (b) You must use a negative (concave) eyeglass lens.
- (c) You must squint.
- (d) You must perform surgery on the eye to shorten it.

Part 2:

If the eye is too short, as seen in the photograph model at the left below by moving the retina to the left in the model (front of the tank), the image will not be in focus. This is seen in the photograph at the center, with the reflection of the object and the unfocused retinal image, and the close-up of the unfocused image seen at the right below.



What must be done to resolve this problem in a real eye, so that the image is moved to the plane of the retina:

- (a) You must use a positive (convex) eyeglass lens.
- (b) You must use a negative (concave) eyeglass lens.
- (c) You must squint more.

- (d) You must stop squinting and open up your eye very wide.
- (e) You must have surgery on the eye to lengthen it.

Click here for Answer #286 after May 14, 2007.

Question of the Week

Outreach Index Page

Lecture-Demonstration Home Page

For questions and comments regarding the *Question of the Week* contact
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given on the Lecture-Demonstration Home Page.