Next-Time Question

To see more of her head in the mirror, she

a) should hold the mirror closer.
b) should hold the mirror farther away.
c) needs a bigger mirror.
To see more of her head in the mirror, she

a) should hold the mirror closer.
b) should hold the mirror farther away.
c) needs a bigger mirror.

Answer: c. needs a bigger mirror
If she holds the mirror closer, her image appears bigger, but so does the mirror. If she holds the mirror farther away, both her image and the mirror are proportionally reduced. As the ray diagrams show, she sees the same proportion of her face at any distance. Try this yourself and see! And if you cannot see your full face, you need a bigger mirror. How big? At least half the size of your face.