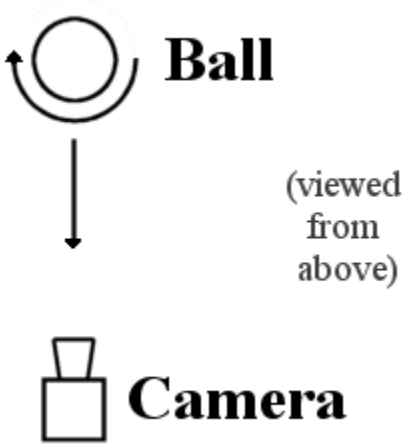
Question #206

Pictured below is a styrofoam ball about 4 inches in diameter, which I am about to throw at a video camera as it records the action. How I will throw the ball and what it does as it moves toward the video camera is the subject of this week's question.

When I throw the ball, I will throw it side-arm like a right-handed pitcher might do. I will release it by letting it slide off the fingers of my hand, giving the ball a clockwise spin as viewed from above as it moves toward the camera, as seen in an mpeg video by clicking your mouse on the photograph of the ball below. The question involves the path the ball will take as it speeds toward the camera. The sketch at the right below illustrates some of the details of the situation.



Question: As the ball speeds from my hand toward the camera:

- (a) it will curve off to the left as viewed by the camera.
- (b) it will curve off to the right as viewed by the camera.
- (c) it will move straight toward the camera, only falling due to gravity.

The second part of this question is to explain *why* the ball curves, and to identify the physics concept involved.

Click here for Answer #206 after January 31, 2005.

Question of the Week

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For questions and comments regarding the *Question of the Week* contact Dr. Richard E. Berg by e-mail or using phone number or regular mail address given on the Lecture-Demonstration Home Page.