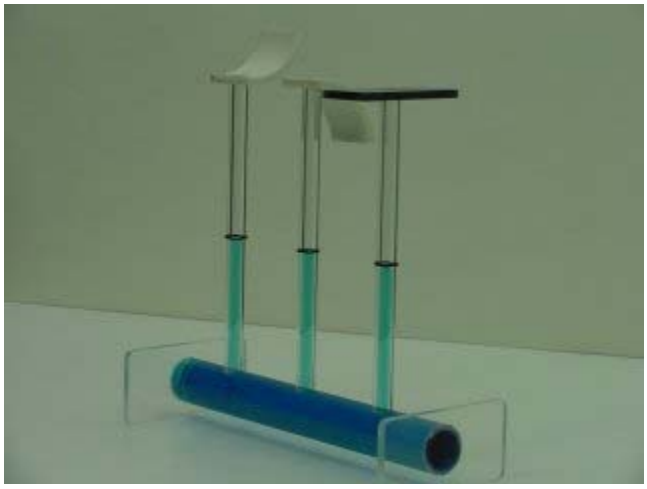
Question #231

The photograph below consists of a (blue) water reservoir with three vertical tubes extending from the top of the reservoir. Each tube is rendered unique by the shape of the flange at the top end of the tube.



We will use a small heat gun, with the heating element removed, to blow air across each of the tubes, left to right: (a) a concave flange, (b) a convex flange, and (c) a flat flange. the question is what will happen to the water level in each tube when air is blown over the top of the tube. One of three things might happen: the water level in the tube will rise, the water level in the tube will fall, or the water level in the tube will remain the same.

1. When air is blown across the concave flange at the top of tube (a), the water level in that tube will:

- (a) rise.
- (b) fall.
- (c) remain the same.

2. When air is blown across the convex flange at the top of tube (b), the water level in that tube will:

- (a) rise.
- (b) fall.
- (c) remain the same.

3. When air is blown across the flat flange at the top of tube (c), the water level in that tube will:

- (a) rise.
- (b) fall.
- (c) remain the same.

Click here for Answer #231 after November 14, 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.