

Re: Beginner's Question about Bernoulli and Tanks

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PD wrote:

- > *It is if you're not at the hole. If you're at the hole, the pressure is*
- > *atmospheric, because the NET force on the bit of water flying out the*
- > *hole is zero (it's leaving at constant velocity), and the air pushing*
- > *in is obviously at atmospheric pressure, so the water behind the*
- > *flying*
- > *bit must be pushing with atmospheric as well.*

This is just the answer I was looking for! The textbooks never explained WHY; neither did any web site. Thank you very much. It's a simple explanation, but when one is a beginner the formulas and concepts get crowded and take time to gel.

- > *Now, I do think it's worthwhile raising your hand in class and asking*
- > *in your best furrowed-brow expression:*
- > *"Gee, Professor, I understand the pressure in the fluid right at the*
- > *hole is atmospheric, just like at the top of the tank. But what about*
- > *at the other side of the tank, at the same depth as the hole?*
- > *Shouldn't*
- > *that be at higher pressure because it's under all that water above*
- > *it?"*
- > *Then it will be your turn to see if the professor squirms and gibbers*
- > *for a bit.*

Cool!