

POW #7 - Geometry

Well, Well, Well [Problem #16027]

I was telling my dad's neighbor Fred about the well my cousin Frank had drilled in his yard. Fred installs well pumps for a living. I said, "It's only producing $\frac{3}{4}$ of a gallon a minute, but when it's full, the water is about 400 feet deep."

"That's about 600 gallons of water stored," said Fred. "That should be plenty for his small cabin."

"How'd you know that's 600 gallons?", I asked.

"If it's a modern standard well, it holds 1.5 gallons per foot," answered Fred.

If the cross section of a standard well is circular, what is its diameter?

(Note that there are 231 cubic inches of water in a gallon.)



Submit your solution in a GoogleDoc that is in your Mathematics Folder. You must explain your solution in sentences! Use the classroom scanner to scan documents and email to yourself.