See the HiHW grading rubric posted on Carmen

Name: _____ Recitation Instructor: _____

A horizontal section of narrow pipe is filled with water whose flow speed is negligible ($v_1 \approx 0$). The **gauge** pressure inside the pipe is $P_{gauge} = 4.0\,\text{atm}$. There is a pinhole-sized leak in the wall of the pipe, and water exits the hole with speed v_2. What is v_2? For the limit check, investigate what happens to v_2 if the gauge pressure inside the pipe drops to zero ($P_{gauge} \to 0$).

Representation:	0	1	2
Physics Concept(s):	0	1	2
Initial Equation(s):	0	0.5	1
Symbolic Answer:	0		1
Units Check:	0	0.5	1
Limits Check:	0	0.5	1
Neatness:	-2	-1	0
Total:			
Correct Answer:	Y	N	

Representation

Physics Concept(s) (Refer to the list posted on Carmen)

Initial Equations

(1) _____

↓ Show Your Equation Work On Next Page ↓

Algebra Work (Symbols only. Don't plug in any numbers yet.)

Symbolic Answer:

Units Check	Limits Check
	a) As $P_{gauge} \rightarrow 0$, what limit does v_2 approach? b) Why does the result make physical sense?

Numerical Answer: (Obtain this by plugging numbers into your symbolic answer.)