

Lab #1

Use the following algorithm (Babylonian algorithm) to compute the $\sqrt{7}$.

1. Set $y = 1.0$.
2. Replace y with the average of y and $2/y$.
3. Repeat Step 2 until its effect upon y is insignificant.
4. Return y .

Complete the table:

n	y_n	$\frac{7}{y_n}$	$\frac{y_n + \frac{7}{y_n}}{2}$
0	3	2.33333333333333333333333333333333	
1			
2			
3			
4			
5			