Prob 4)

- For 4-bit input $n = 0, 1, \ldots, 14, 15$ representing $1.03125 + \frac{n}{16}$

$$\text{output} = \frac{1}{1.0325 + \frac{n}{16}} \cdot \underbrace{2^{15}}_{\text{fixed-point conversion}}$$

- ERROR – largest error is when halfway between partitions
  - e.g., $\frac{1}{a} = .9408825057 \rightarrow \frac{.9685230024 21 - .940882505777}{.940882505777}$

$$= \boxed{2.94\% \text{ max error}}$$