CSC352 HW7

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Question 1

1. The relative error for $\mathbf{Q}$ is 2.

2. The relative error for $\mathbf{R}$ is 1.036.

3. The relative error for $\mathbf{Q} * \mathbf{R}$ is $1.1194e - 15$.

I'm surprised with the first two relative errors. For $\mathbf{Q}$'s relative error, it should be 0 ideally, but I got 2, which shows there is a difference between true $\mathbf{Q}$, and calculated $\mathbf{Q}$. For $\mathbf{R}$, I think it still should be 0 for $\|0\|_p = 0$.