MATH 3191 Written Homework 10
____/20 points

Name: _____

Due: April 6th

Show all work that leads to your answers. I will be providing feedback on the work as well as the answers!

1. (10 points) Let $A \in \mathbb{R}^{2\times 2}$ be defined as below. Give an explicit formula for it's eigenvalues in terms of it's elements. (*Hint*: You don't have to form $A - \lambda I$ to answer this question, but you can if you want to)

$$A = \begin{bmatrix} a & b \\ c & d \end{bmatrix}$$

2. (10 points) Give an example of two matrices that are row equivalent, but have different eigenvalues. (*Note*: You can use a 2×2 to answer this question)