

Name:  
Student ID #:

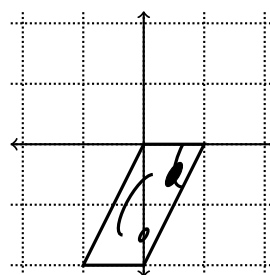
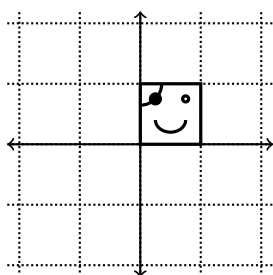
Math 308-M  
Quiz 3

1. [4 points] Compute  $\begin{bmatrix} 4 & 1 \\ 0 & 1 \\ -1 & 3 \end{bmatrix} \begin{bmatrix} 2 & 0 & -1 \\ 5 & 2 & 1 \end{bmatrix}$ .

2. [2 points] Give an example of two  $2 \times 2$  matrices  $A$  and  $B$  such that  $AB = BA$ .

3. [4 points] Oh no, a witch cast another linear transformation spell on Victor!

On the left is Victor's original form, and on the right is Victor after the witch applies the linear transformation  $T$ .



Below, draw what Victor looks like after the witch applies  $T$  again.

