1. Let
$$A = \begin{pmatrix} 1 & 1 \\ 0 & 1 \end{pmatrix}$$
and
$$B = \begin{pmatrix} 2 \\ -4 \end{pmatrix}$$
What, if it is possible to do the multiplication, is

   (a) $C = AB$
   (b) $D = BA$
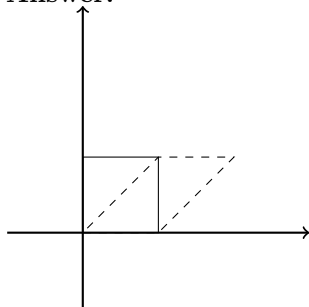   (c) $E = A^T B^T$
   (d) $F = B^T A^T$

   Answer:
   $$C = \begin{pmatrix} -2 \\ -4 \end{pmatrix}$$
   Can't compute D nor E.
   $$F = (-2, -4) = C^T$$

2. Draw a unit square with coordinates in anti-clockwise order $(0,0), (1,0), (1,1)$ and $(0,1)$. `Transform` this square now by applying the matrix A above to it. That is, multiply each point by A. What is the shape you get?

   Answer:

3. Discussion of three programs to achieve same end, one written using GLUT, one using SDL, and one using Python

Outside tutorial exercises:

- Visit the following web sites and have a look around them. Please spend at least 45 mins in total looking at them.

   1. OpenGL

2. OpenGL Blue Book

3. OpenGL Red Book

4. NeHE Tutorials