Please show your work or describe your reasoning. Do not simply mark an answer without context.

**Problem 1:**

Draw the following vectors, with the tail at the origin (0,0). Assume a basis with two vectors: \( \hat{x} \) points to the right and \( \hat{y} \) points upwards. You may use either the geometric or algebraic method, but make sure your final answers are clearly drawn and labeled in the figure.

a) \( \vec{a} = [1, 2] \)

b) \( \vec{b} = [3, -1] \)

c) \( \vec{c} = \vec{a} + \vec{b} \)

d) \( \vec{d} = \vec{c} - 2\vec{b} \)

e) \( \vec{e} = -2\vec{a} \)

**Problem 2: MATLAB**

Assume that the workspace and command window have been cleared. What is the output from the following scripts? If an error would result, briefly explain why.

\[
\begin{align*}
a &= 2; \\
2 &= b; \\
c &= (a + b) \\
\end{align*}
\]

\[
\begin{align*}
\text{Error} & \quad \text{Error} & \quad \text{Error}
\end{align*}
\]

List one concept that confuses you, or one question you would like me to answer