

Name: \_\_\_\_\_

- Put your name in the “ \_\_\_\_\_ ” above.
- Answer all questions.
- Proofs are graded for correctness, clarity, rigor, neatness.
- Good luck!

1. Write down an equation for a line which

- passes through the point  $(1, 2, 3)$  and
- is perpendicular to the vector  $\begin{bmatrix} 1 \\ 1 \\ 1 \end{bmatrix}$ .