

Math 3120, Linear Algebra, Spring 2026, Worksheet 1

January 28, 2026

Name _____

1. Label the following statements as “true” or “false.”

- Given any two points p, q , there is at least one choice of m, b giving a line passing through both points.
- Given any two points p, q , there is at most one choice of m, b giving a line passing through both points.
- Given any two points p, q with $p \neq q$ there is at least one choice of m, b giving a line passing through both points.
- Given any two points p, q with $p \neq q$ there is at most one choice of m, b giving a line passing through both points.
- One can find three points p, q, r , all distinct, such that there is at least one choice of m, b giving a line passing through all three points.