

Precalculus

Homework Lecture 9

1. Write down an equation for the line passing through the indicated points. The answer key has not been proofread, use with caution.

- (a) L_1 passing through $(1, 2)$ and $(2, -1)$.
- (b) L_2 passing through $(1, 1)$ and $(2, -2)$.
- (c) L_3 passing through $(0, 1)$ and $(1, 0)$.
- (d) L_4 passing through $(3, 5)$ and $(7, -11)$.

2. A set of lines is given by a pair of points. The answer key has not been proofread, use with caution.

Line name	Point on the line	Second point
L_1	$(1, 2)$	$(2, -1)$
L_2	$(1, 1)$	$(2, -2)$
L_3	$(0, 1)$	$(1, 0)$
L_4	$(3, 5)$	$(7, -11)$

Find the intersection of the indicated pair of lines, or show that no such intersection exists (i.e., the lines are parallel).

- (a) L_1 and L_2 .
- (b) L_1 and L_3 .
- (c) L_1 and L_4 .
- (d) L_2 and L_3 .
- (e) L_2 and L_4 .
- (f) L_3 and L_4 .