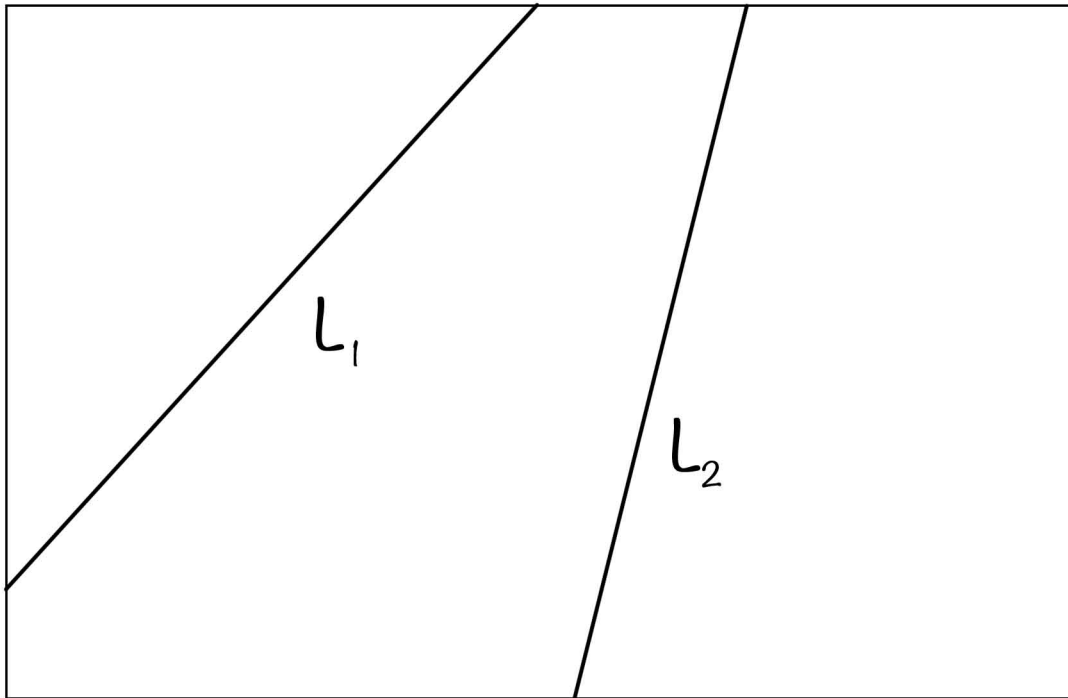


Handout: An Exploratory conundrum

Consider lines on a piece of paper.

We might think to define a new concept "pretty parallel" for any two lines that don't cross on the page. So for instance lines L_1 and L_2 are pretty parallel:



Suppose I tell you now that I'm thinking about a third line L_3 that is pretty parallel to L_2 .

1. Is it possible lines L_1 and L_3 are **also** pretty parallel?
(Try drawing such a line!)
2. Is it possible that lines L_1 and L_3 are **not** pretty parallel?
(Try drawing such a line!)

Would there be any difference in your answers if we changed the pretty parallel line to parallel lines in questions (1) and (2)?