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Quiz 1

This quiz is graded out of 6 marks. No books, calculators, notes or cell phones are allowed. You must show all your work, the correct answer is with I mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. §1.1 #24 Consider the system of equations

(ux + by = k

cx + dy = 1

ex + fv = m

Discuss the relative positions of the lines ax + by = k, cx + dy = l, and ex + fy = m when

a. the system has no solutions. possibility for the relative position. (I)Three parallel lines, no two that intersect

Ctwo lines that completely overlap. And the other line parallel.

Two paraillel Line with intersect But no common intersection

all lines have different slape but no

b. the system has exactly one solution.

There are two possibility for the relative position.

0

all three lines have differt slope and intersect at a common point.

c. the system has infinitely many solutions.

completely overlap

Common intersection between

all three lines

one possibility for the relative position. all lines are identical

the three lines completely overlap