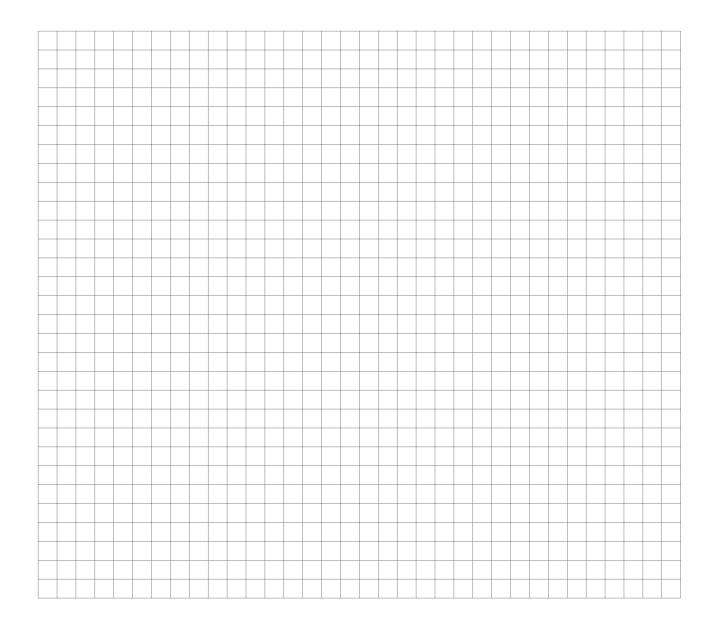Name:
Result:
Group B

1. *(6 points)*

Consider points $A(-1, 3)$ and $B(5, -1)$.

(a) Find the equation of the line l passing through A and B.

(b) Find the equation of the line k parallel to l and passing through $(3, 4)$.

(c) Find the equation of the perpendicular bisector of the line segment AB.

2.   *(6 points)*

Consider the line with equation $3x - 4y = 24$

(a) Find the axes intercepts of the line.

(b) Determine whether the following points lie on the line:

   (i) $(12, 3)$ (ii) $(-4, -9)$ (ii) $(5, -5)$

(c) Find c such that $(c, -3)$ lies on the line.

(d) Sketch the line, showing your results from previous parts.