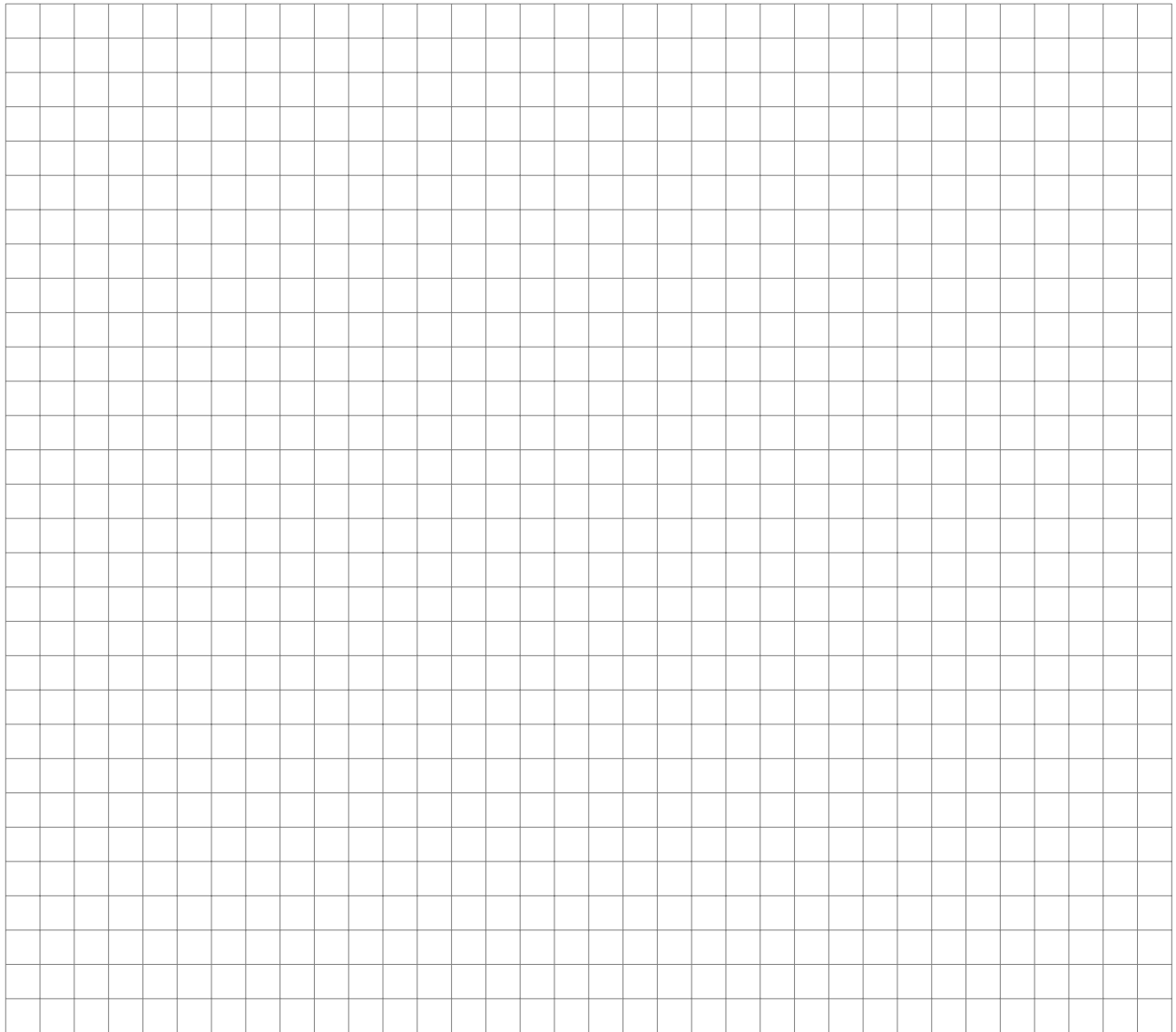Name:
Result:
Group A

1. *(6 points)*

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

(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 $4x + 3y = 24$

(a) Find the axes intercepts of the line.

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

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

(c) Find c such that $(c, -4)$ lies on the line.

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