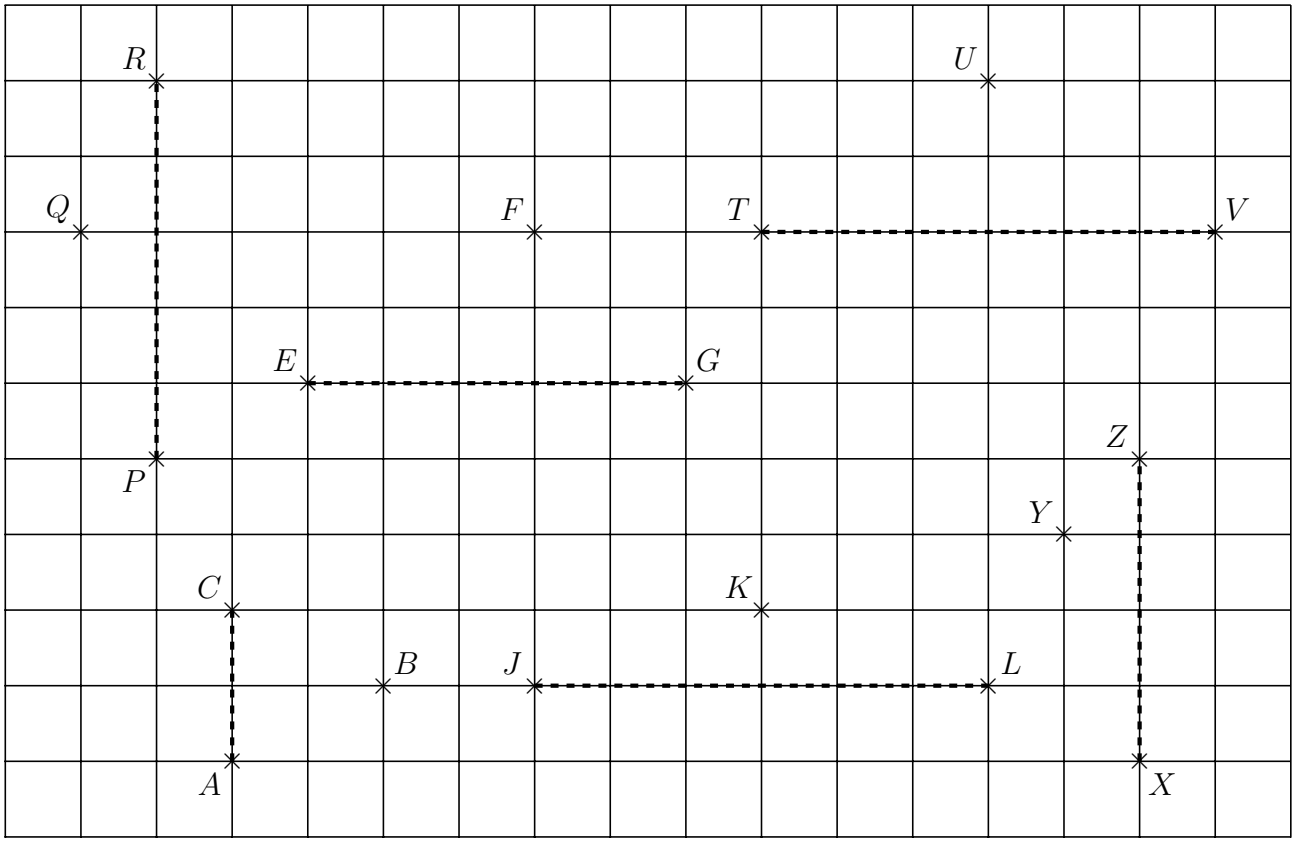
1. On the grid




(i) reflect B in the line AC and label it D.

(ii) reflect F in the line EG and label it H.

(iii) reflect K in the line JL and label it K.

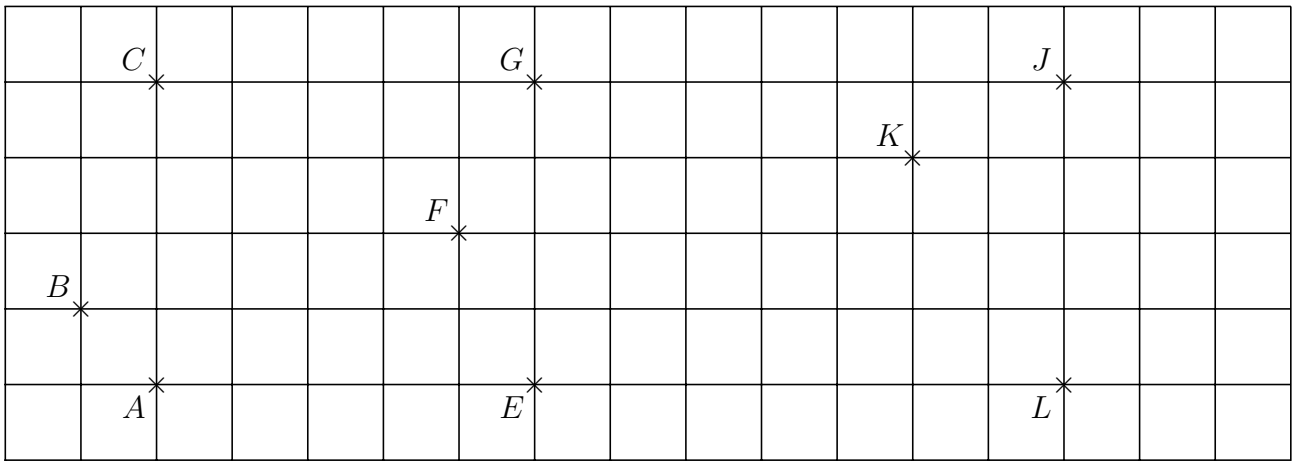
(iv) reflect Q in the line PR and label it S.

(v) reflect U in the line TV and label it W.

(vi) reflect Y in the line XZ and label it N.

(vii) Write inside the quadrilaterals ABCD, EFGH, JKLM, PQRS, TUVW and XYZN either kite or rhombus.
(HINT A kite has 1 line of symmetry and a rhombus has 2 lines of symmetry)

2. On the grid

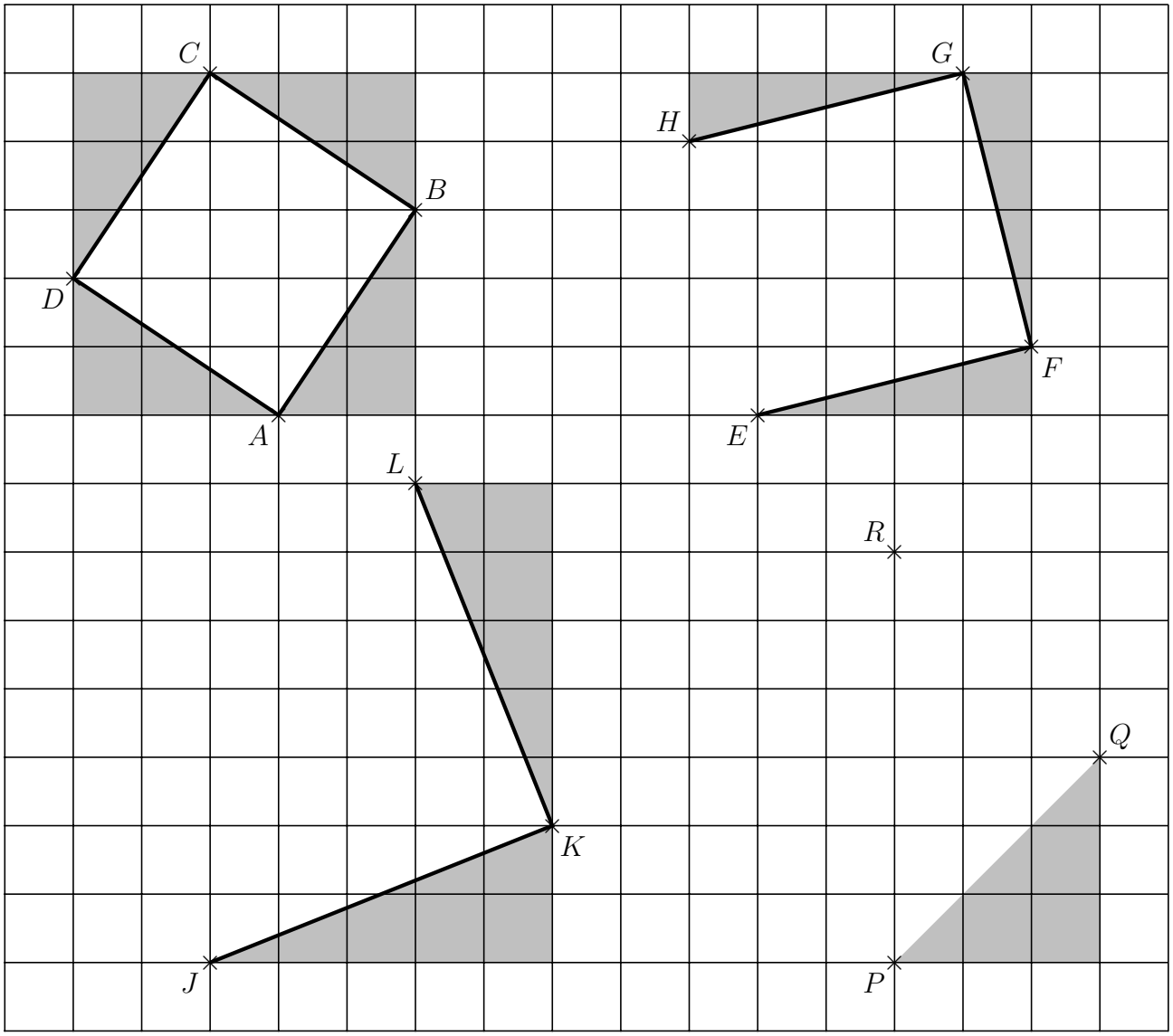



(i) add the point D to make ABCD a kite

(ii) add the point M to make JKLM a kite

(iii) add the point H to make EFGH a rhombus

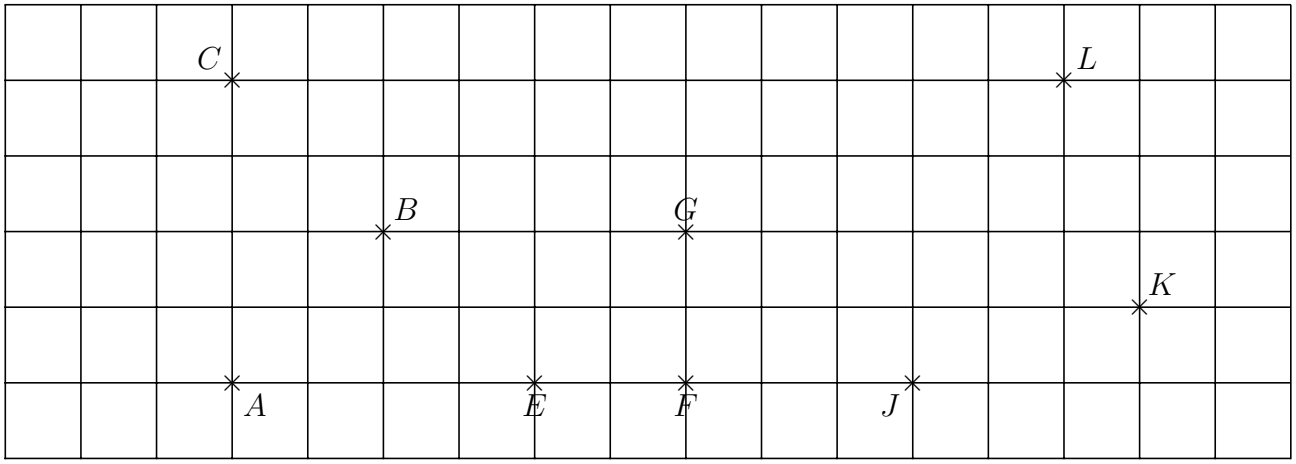
3. On the grid below, see how the 4 rotated* triangles create the square ABCD.




*the triangles are congruent (the same size and shape)

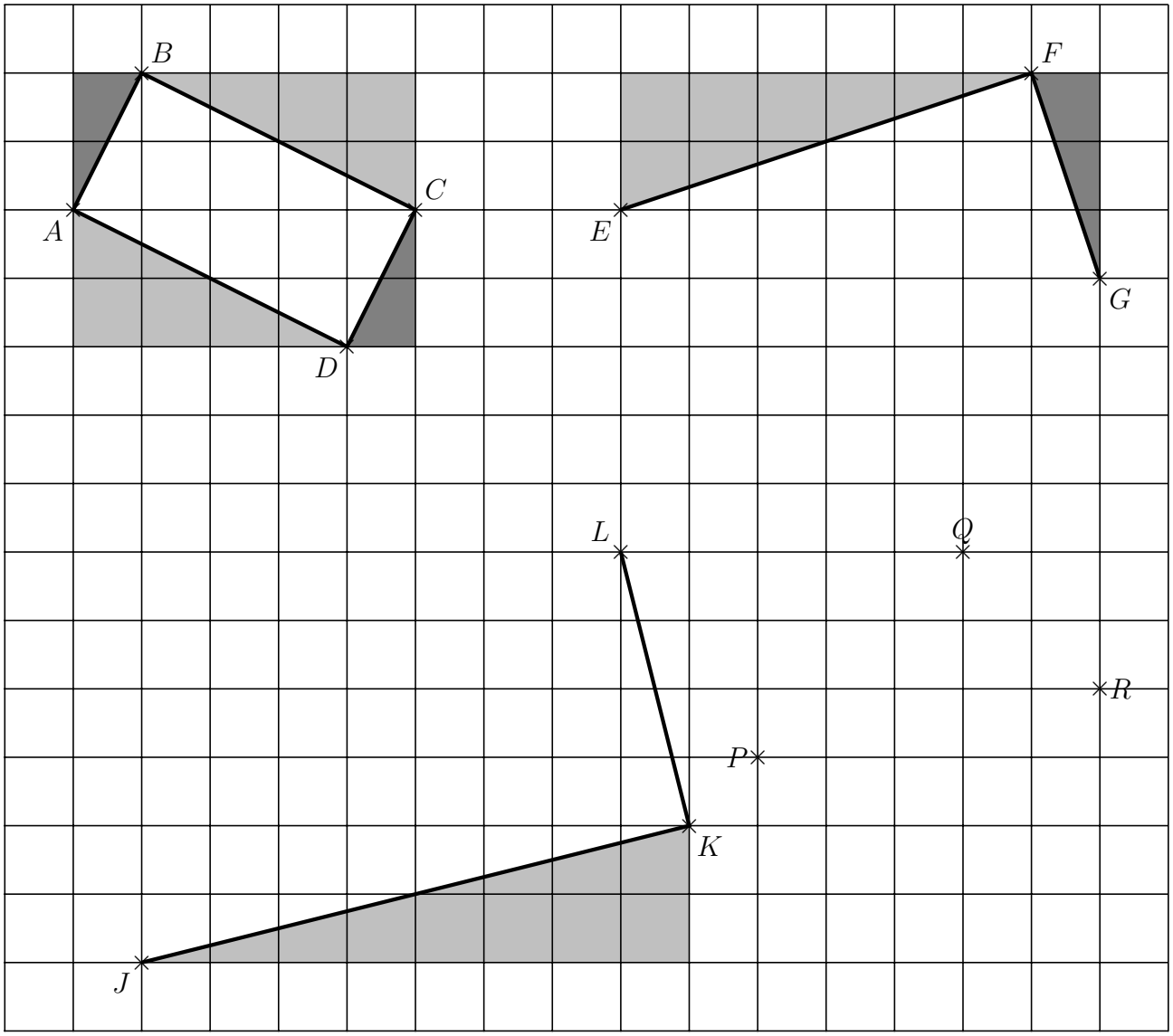
Complete squares EFGH, JKLM and PQRS using shaded triangles to help you.

4. On the grid



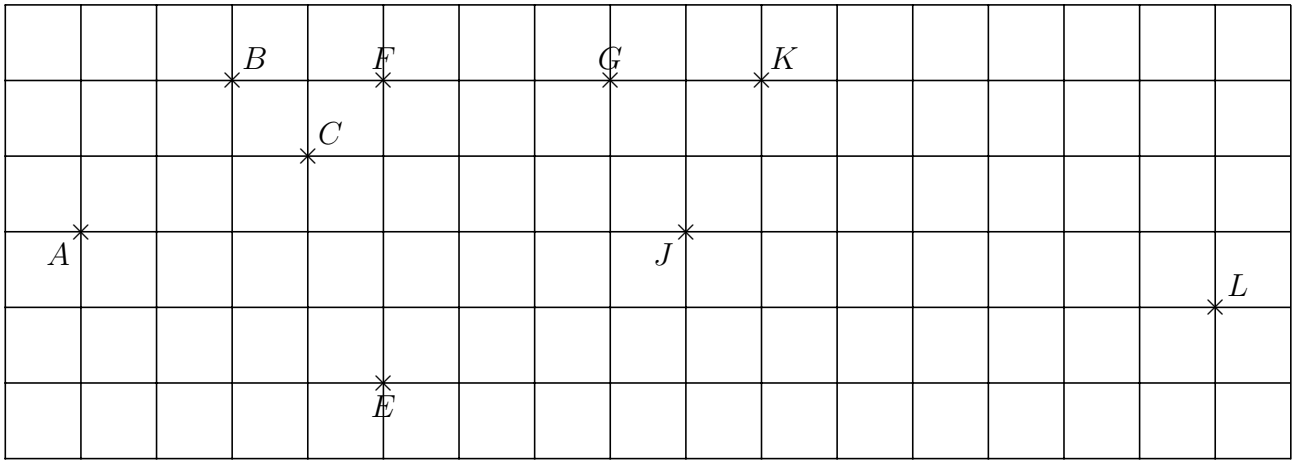

(i) add the point D to make ABCD a square (ii) add the point M to make JKLM a square (iii) add the point H to make EFGH a square (HINT it's sides are on the grid lines)

5. On the grid below, see how the 2 pairs of rotated triangles create the rectangle ABCD




Complete rectangles EFGH, JKLM and PQRS using shaded triangles to help you.

6. On the grid




(i) add the point D to make ABCD a rectangle

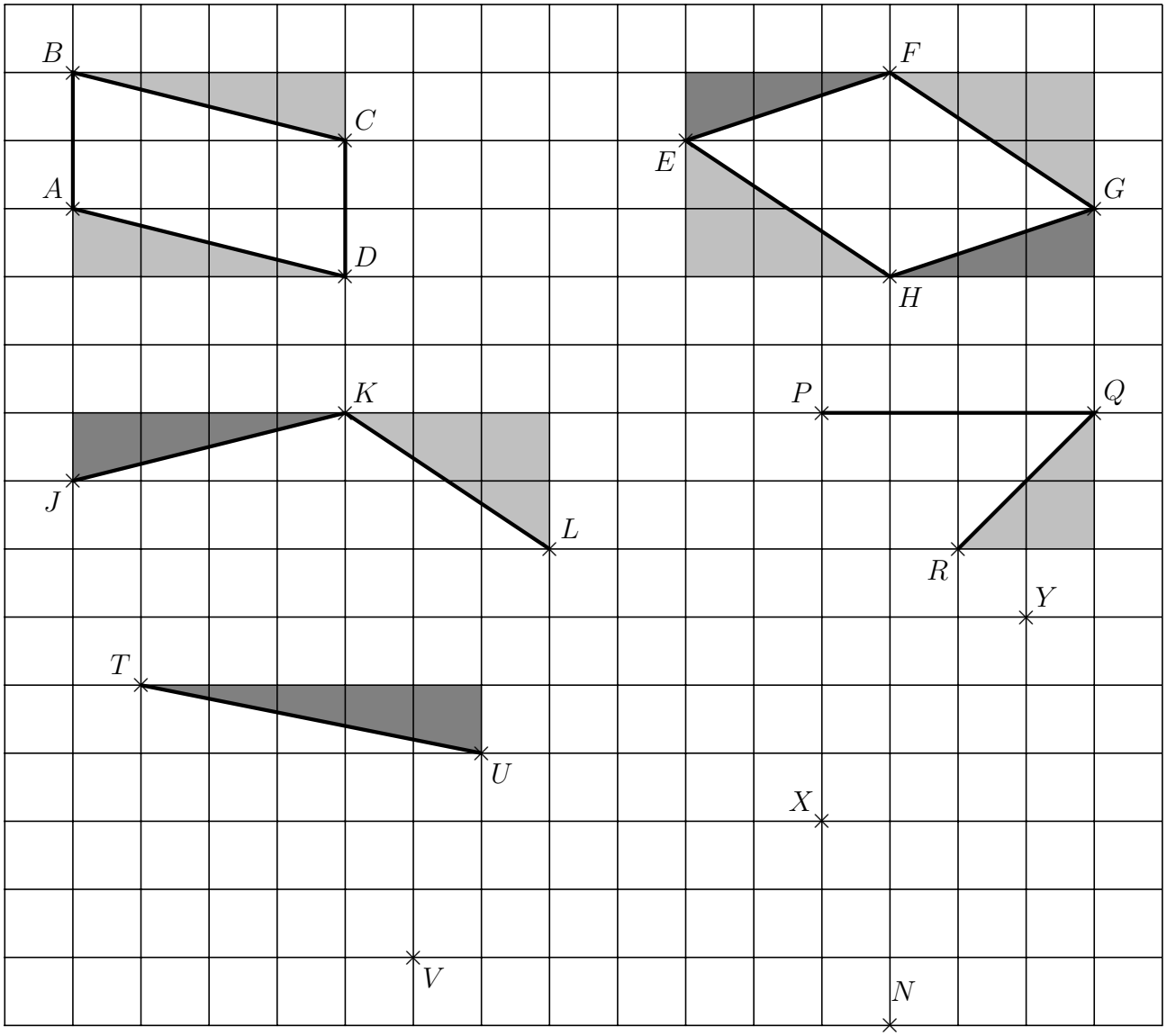
(ii) add the point M to make JKLM a rectangle

(iii) add the point H to make EFGH a rectangle (HINT it's sides are on the grid lines)

7. On the grid below, see how

a pair of rotated triangles create the parallelogram ABCD

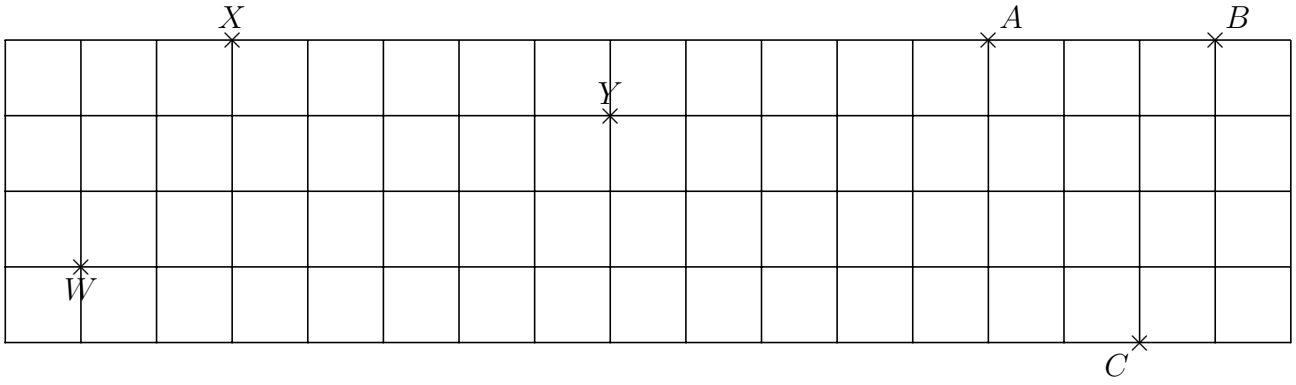
and 2 pairs of rotated triangles create the parallelogram EFGH.




Complete parallelograms JKLM, PQRS, TUVW AND NXYZ

You may use shaded triangles to help you.

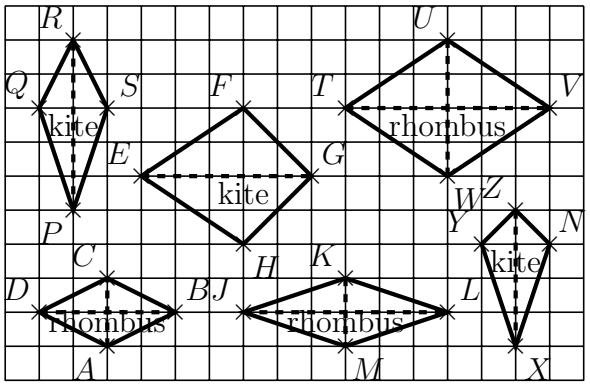
8. (i) On the grid add point D to make ABCD a parallelogram.



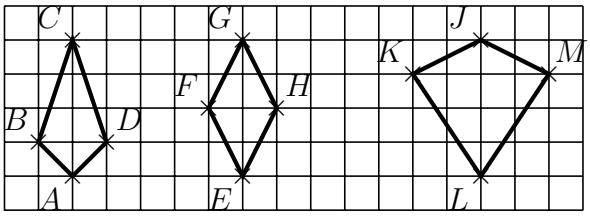

(ii) add the point Z to make WXYZ a parallelogram

Answers

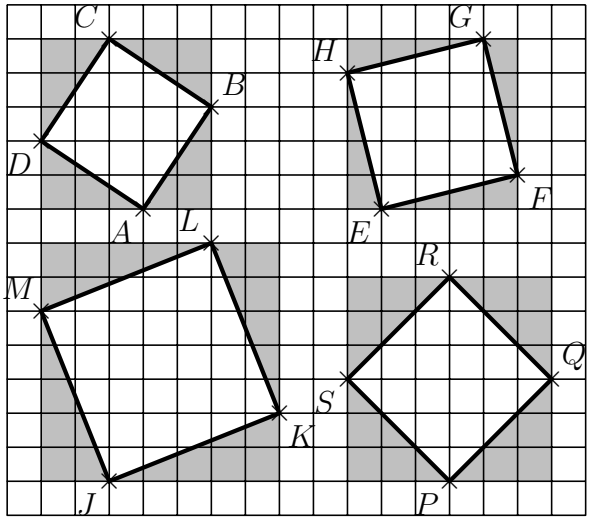
1)



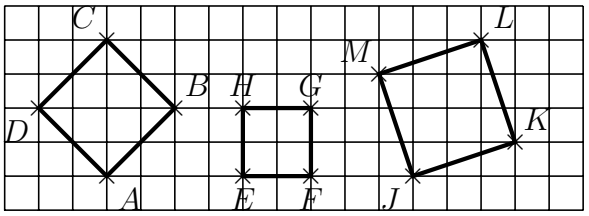

2)



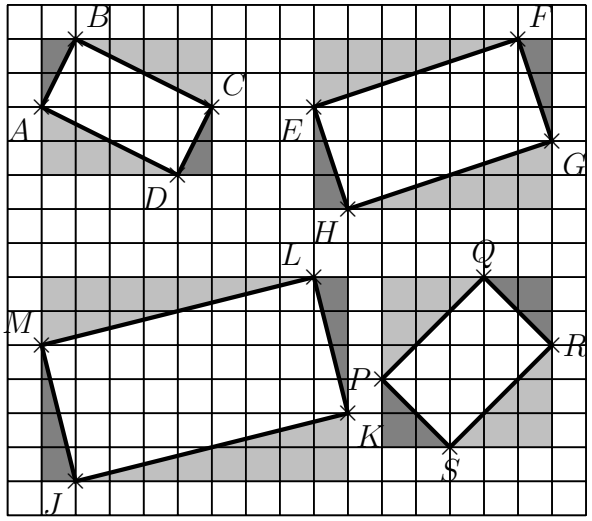

3)



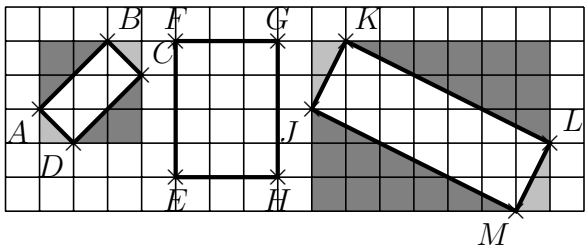

4)



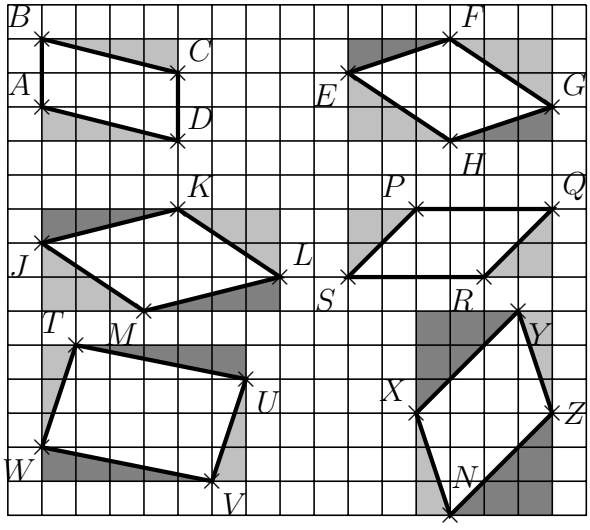

5)




6)




7)




8)