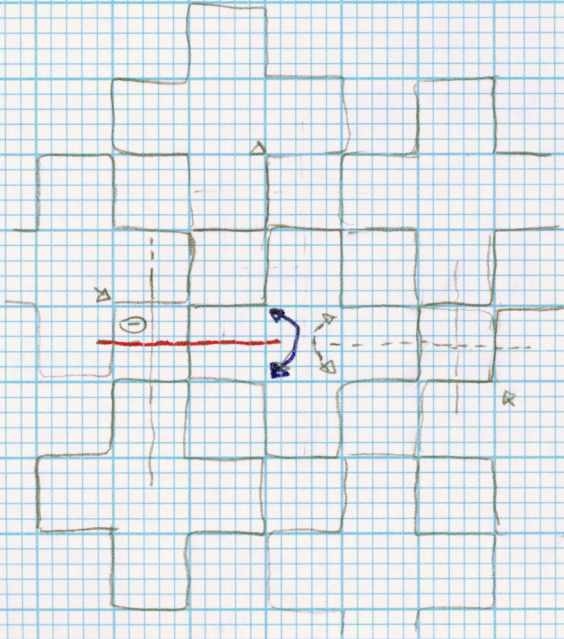


PRELIMINARY OBSERVATIONS

It is not possible to tile with key tiles alone or with crosses alone. Two sets of arrow markings cannot cross at corners by shape-alone version of tiles and two crosses cannot abut.

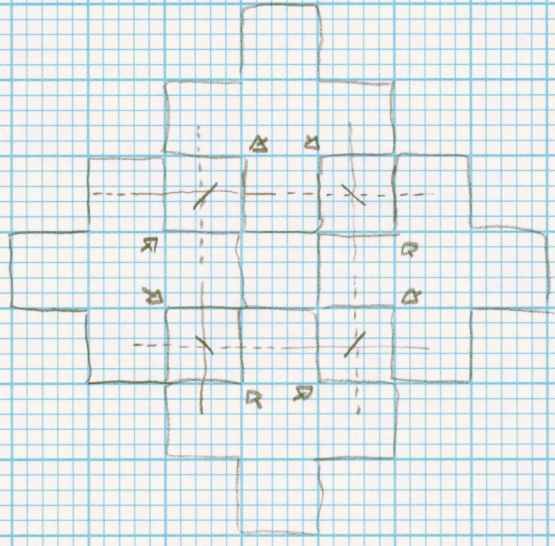


Above arrangement not possible because

(1) is A or B tile by arrow in.

Horizontal stripe is blue and vertical stripe is red but red stripe contradicts the blue curved arrows on the cross tile.

Dashed line represents red stripe and solid line represents blue stripe.



Crosses must be arranged with ends together around a key tile. The

key tiles sharing two sides with

two crosses each have A or B tiles,

by arrows in and coloured stripes

from crosses. The A or B tile

has an arrow out and two

opposite arrows in called arms

and one further arrow in. The

arm positions are abbreviated

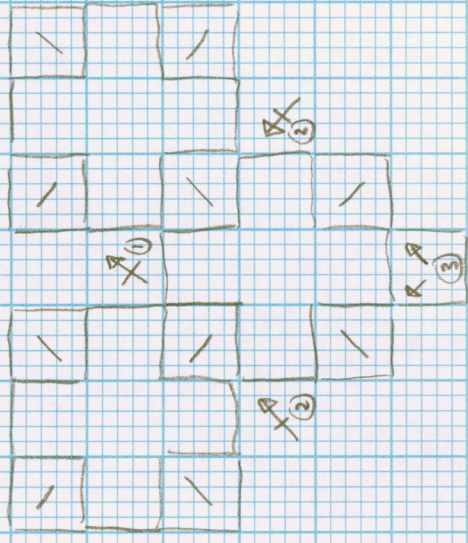
by a short line on the above

diagram. The arrow out position

is as yet undetermined.

It is not possible to tile without a C tile.

Assuming only A and B key tiles are used below, we make a direction for key tile at (1) and find directions for key tiles at (2). But then (3) cannot be A or B because two out arrows are needed.



PRELIMINARY CONCLUSION: All tiles are needed.

The crosses are arranged around a key tile with ends towards the key tile. Each

cross has an A or B tile nested into

its corners, sharing two sides.