

# Routes

Find the different shortest routes from point A to each other letter. Routes must be on the lines in a horizontal or vertical direction.

I	H	G	
C	D	F	
A	B	E	

Record your results in the table below.

Journey	Number of routes	Different routes
AB	1	AB
AC		
AD		
AE		
AF	3	ACDF, ABDF, ABEF
AI		
AH		
AG		

Can you spot any patterns?

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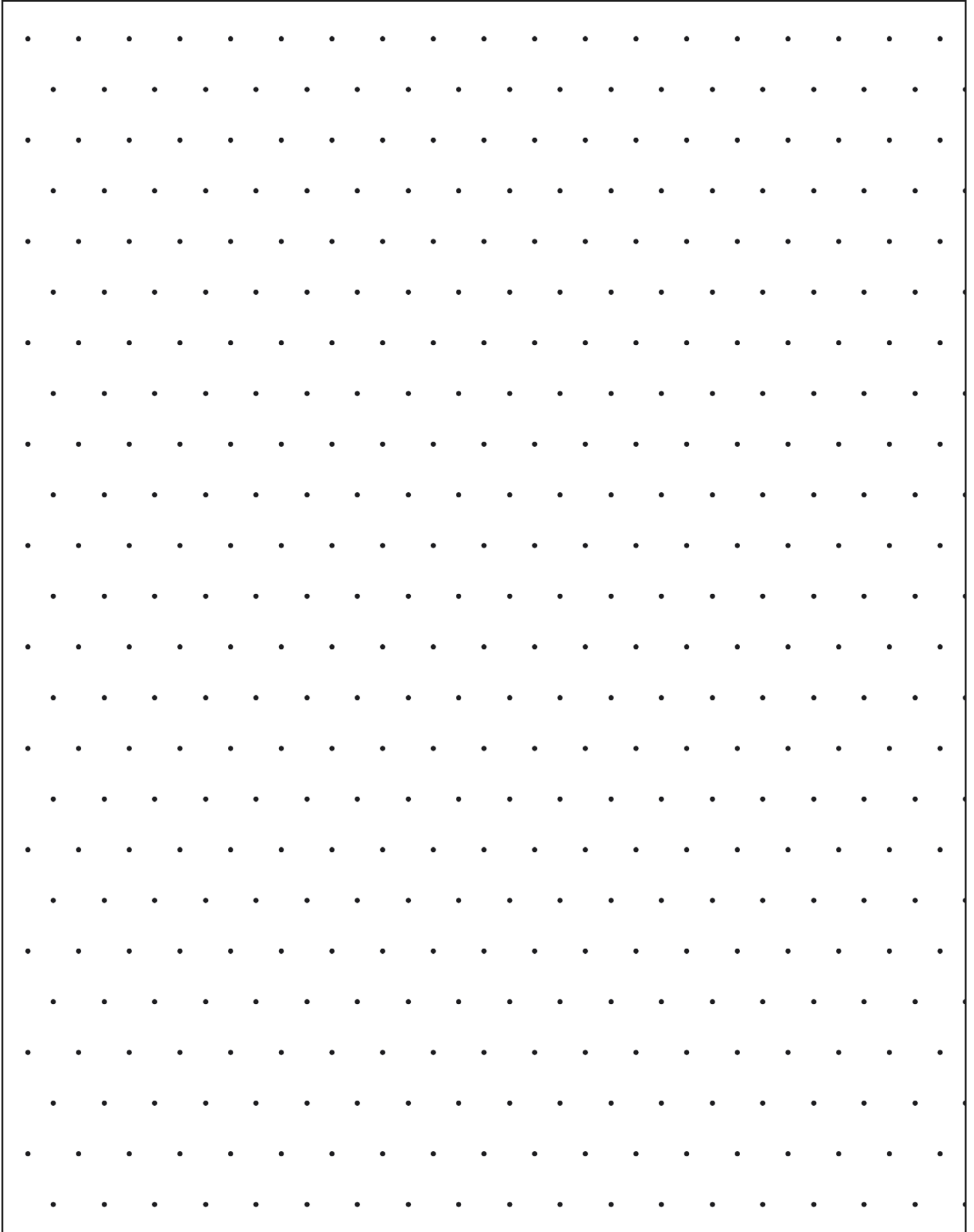
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## Challenge

Add another set of letters in the row above the columns and to the right and investigate the number of routes.

Try routes on isometric paper.

# Routes



# Answers

Journey	Number of routes	Different routes
AB	1	AB
AC	1	AC
AD	2	ABD, ACD
AE	1	ABE
AF	3	ACDF, ABDF, ABEF
AI	1	ACI
AH	3	ABDH, ACDH, ACIH
AG	6	ABEFG, ABDFG, ABDHG, ACIHG, ACDHG, ACDFG