

Mathematics

Comparing gradients

Downloadable Resource

Mr Maseko



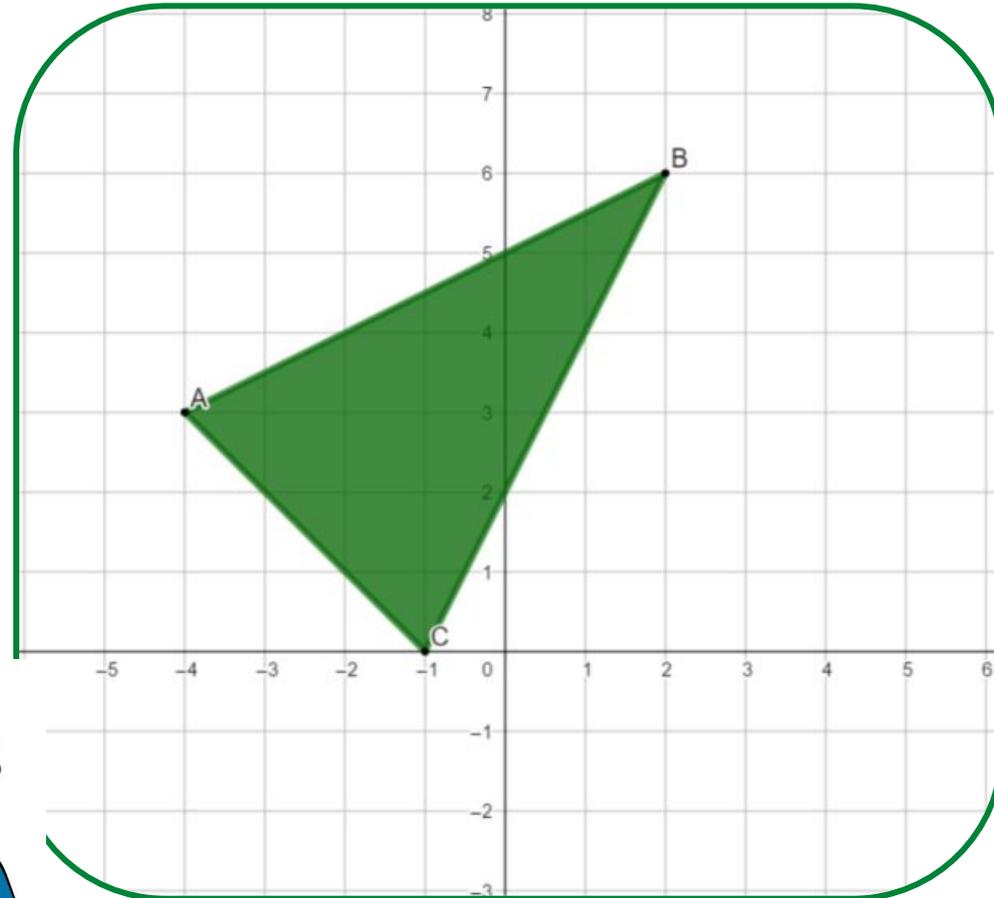
Try this

How many ways could you move one vertex to make this a right angled triangle?



If I move point B to (2,3) there will be a right angle at C.

If I move point A to (0,7) there will be a right angle at B.

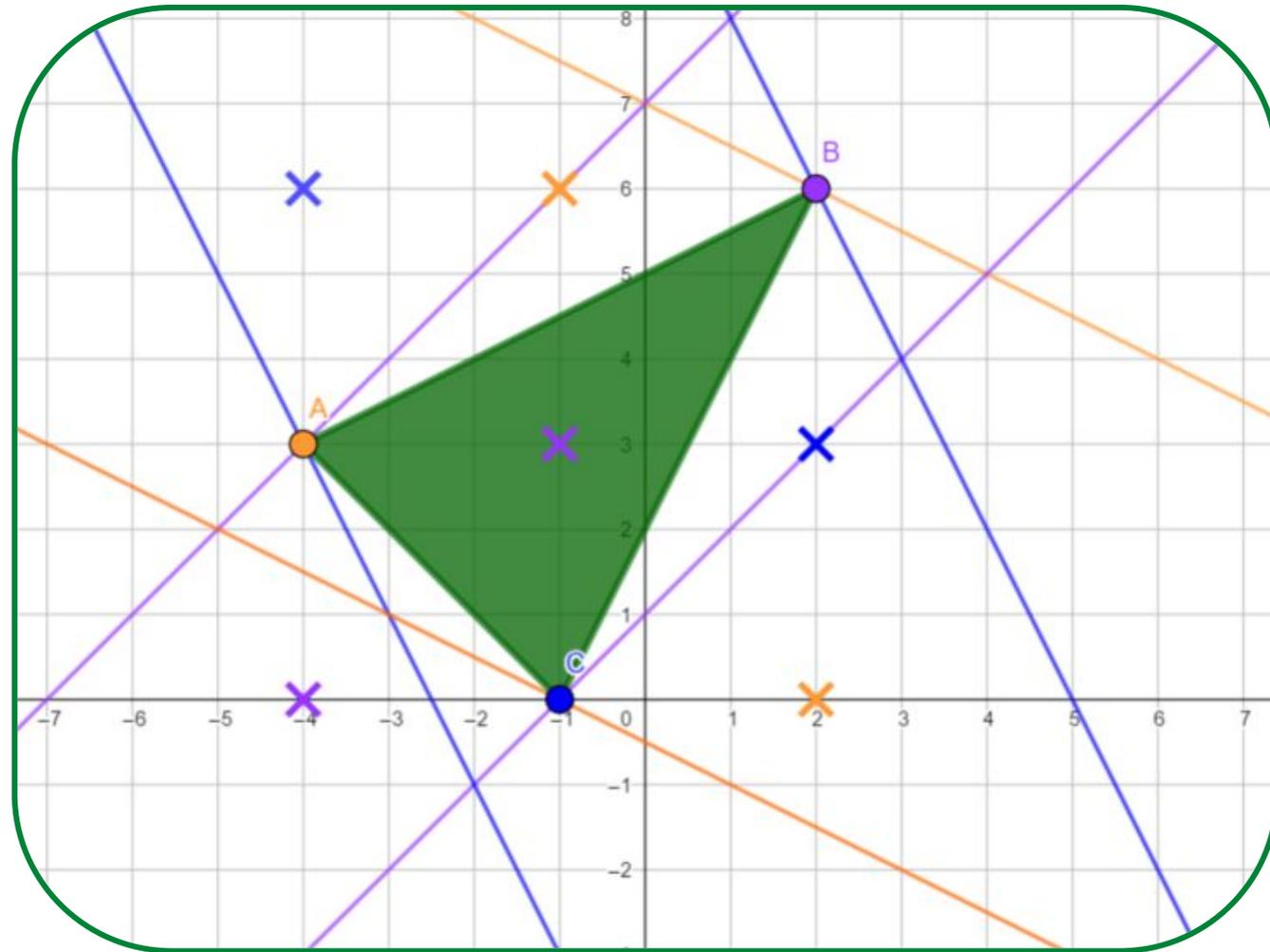


Connect

Move A to orange X

Move B to purple X

Move C to blue X

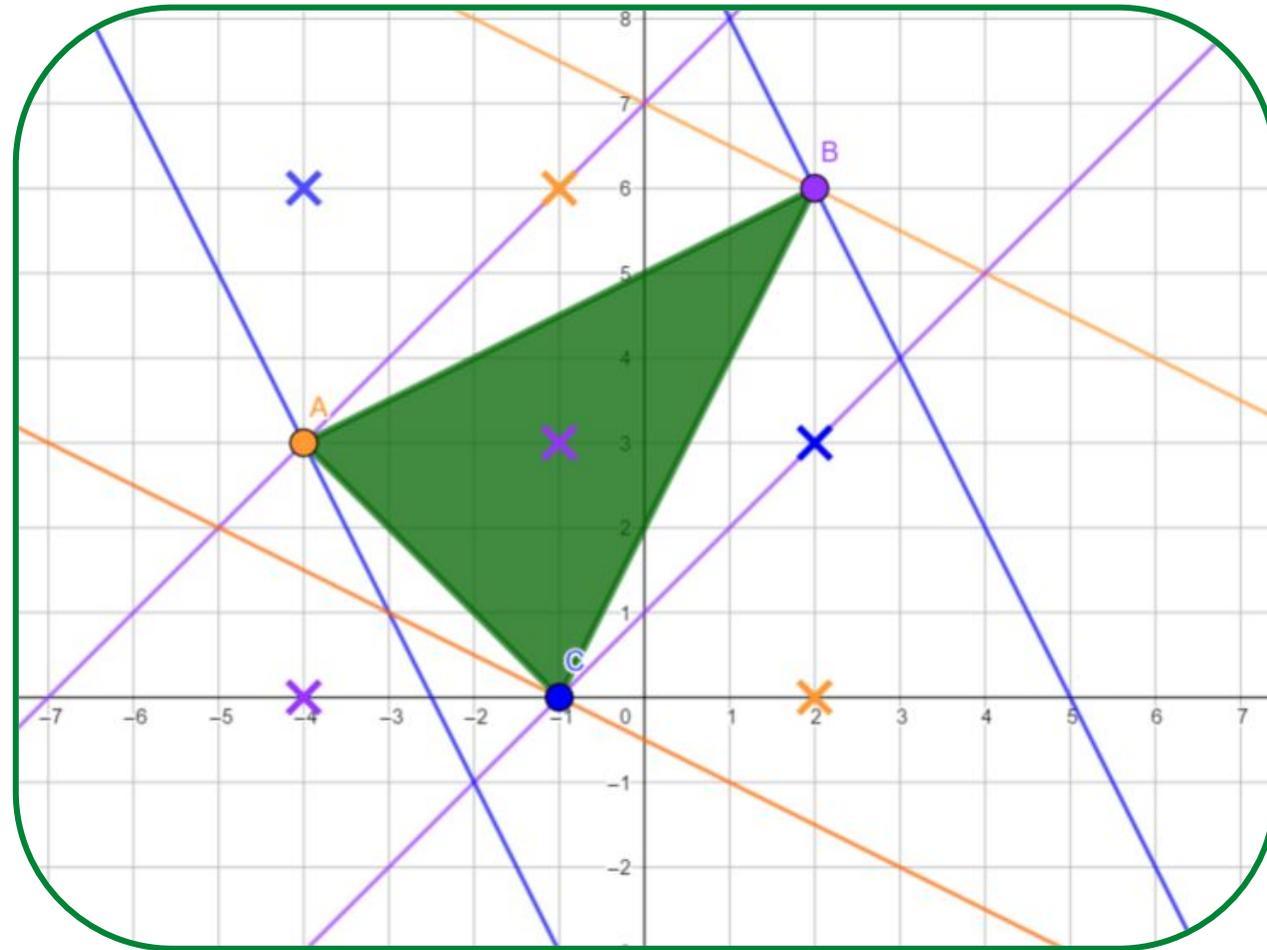


Connect

Move A to any point on the orange line

Move B to any point on the purple line

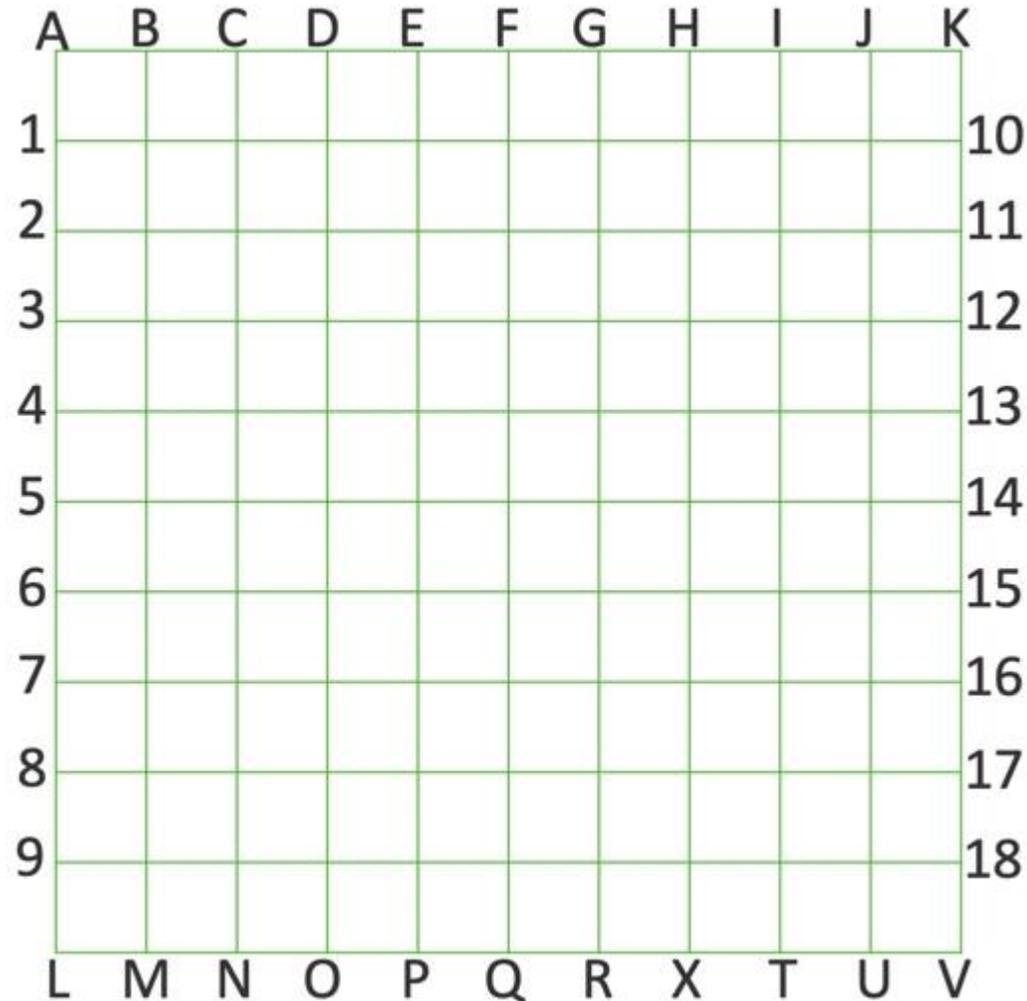
Move C to any point on the blue line



Independent task

Calculate the gradient of the line segments:

- a) LK
- b) AV
- c) A14
- d) LF
- e) 5K
- f) N17
- g) I17



2) Give a line segment that will be parallel to LK

3) Which of the line segments are perpendicular?



Explore

Find the gradient of the perpendicular line segments of each of these triangles, what do you notice?

Line segment	Gradient
AB	
BC	
DE	
EF	
IH	
HG	
JK	
KL	

