

NAME: _____

Rolling Locus

Method PART 1:

1. Cut out shape 1
2. Create a small hole in the centre of the shape with a pencil
3. Roll the shape along a straight line
4. Draw the LOCUS of the centre dot.
5. REPEAT with other shapes

How does the locus change with different shapes?

Shapes

- 1- Triangle
- 2- Square
- 3- Pentagon
- 4- Hexagon
- 5- Decagon
- 6- Circle

Method PART 2:

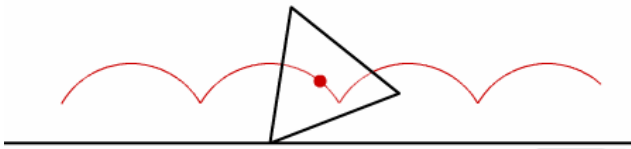
1. Starting with shape 1 make a small hole in the corner of the shape
2. Roll the shape along a straight line
3. Draw the LOCUS of the corner dot.
4. REPEAT with other shapes

How does the locus change with different shapes?

You are expected to produce:

- A poster of your results
 - Clear explanations of maths words (e.g. locus, polygons etc)
 - Clear explanations of what happens when different shapes are used.
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Below is an example of a triangle with the dot in the middle.
What would happen if the dot was in a corner?



(<http://nrich.maths.org/content/id/4809/graphs1.swf>)

Peer Assessment for ROLLING LOCUS project

Marker: _____

Content Excellent(3) Fair(2) Poor(1)
(Amount of work done in 3 hours)

Correctness Excellent(3) Fair(2) Poor(1)
(How much of it is right and accurate)

Independence Most of the time(3) Sometimes(2) Rarely(1)
(Can the person work on their own?)

Communication Very clear(3) Not clear but neat(2) Poor and messy(1)
(Work is well presented, illustrated, and organised. Is everything explain clearly?)

Total Marks: _____

Grade: _____



MARK	GRADE
10 → 12	A
8 → 9	B
6 → 7	C
4 → 5	D

State 3 thing the person did well:

1. _____
2. _____
3. _____

State 3 things the person could improve:

1. _____
2. _____
3. _____

Give this assessment sheet back to the student to improve the project

Teacher's grade: _____

Teacher comment:

