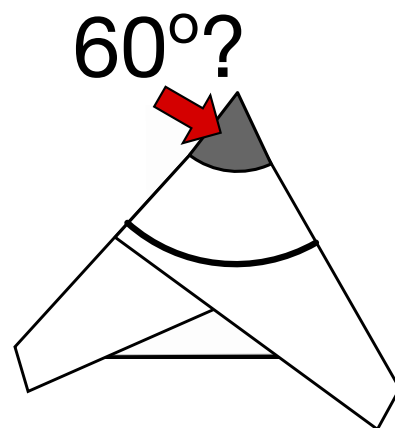
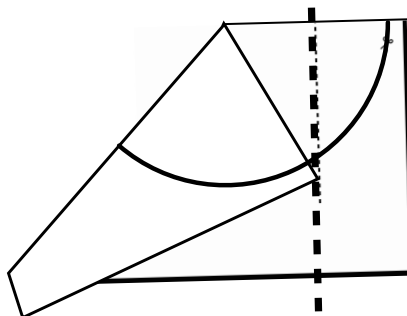
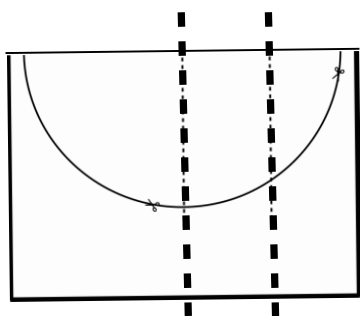


Snowflake Geometry



Snowflakes in real life have 6 axes with 6-fold symmetry. Most pictures of snowflakes on wrapping paper and seasonal jumpers have 8 axes and are in fact snow-fakes! Can you prove this mathematical method gives a true 60 degree angle?

- Mark the half-way and three-quarter lines across the page
- Fold the top corner down to meet the three-quarter line, with your fold meeting the half-way line at the top
- Fold the top edge down to meet the other side



How can you prove this angle is 60 degrees? Construct a diagram in the space below including the relevant shapes, lines and lengths.

If it helps, you could assume the length of the top edge of the page is 4 units.