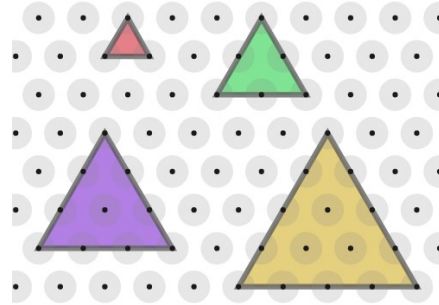


When working on an isometric grid, we can measure areas in terms of equilateral triangles instead of squares.

Here are some equilateral triangles.

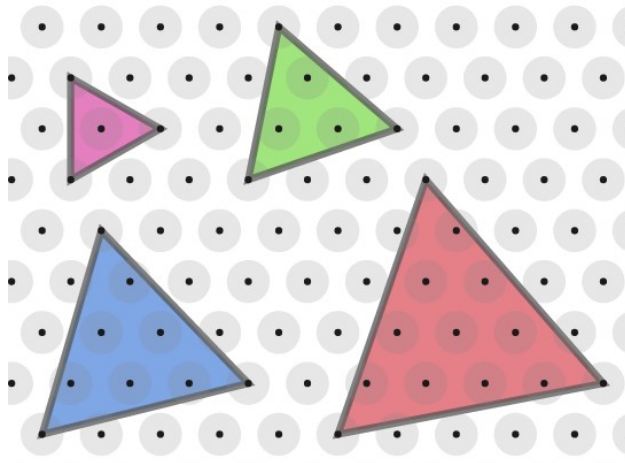
If the area of the smallest triangle is 1 unit, what are the areas of the other triangles?

Can you see a relationship between the area and the length of the base of each triangle?



**Will the pattern continue?
Can you explain why?**

All the triangles in the first image had horizontal bases, but it is also possible to draw tilted equilateral triangles.



Here are some equilateral triangles with a "tilt" of 1.

Can you convince yourself that they are equilateral?

Can you find their areas?

Can you find a rule to work out the area of any equilateral triangle with a "tilt" of 1?

Can you explain why your rule works?

What about triangles with a "tilt" of 2?

What about other tilted triangles?