

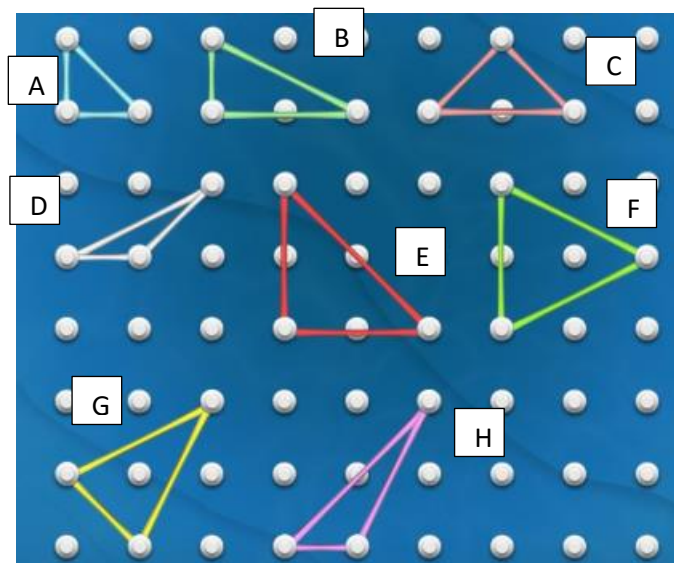
Building and Using a Geoboard! Part 2

Task 1 Triangles

Create different triangles on your geoboard.

How many different triangles can you make?

Give each triangle its proper name. E.g.: isosceles, scalene, right-angled triangle, equilateral triangle...



A. Isosceles, right angle triangle.

B. Right-angled triangle.

C. Isosceles triangle

D. Scalene

E. Isosceles, right angle triangle

F. Isosceles triangle

G. Isosceles triangle

H. Scalene

Note: It is not possible to make an equilateral triangle on this type of geoboard.

Task 2 Sorting Triangles

Create different triangles on your geoboard.

Divide them into two groups according to a criterion.

In how many ways can you sort your triangles?

Give some examples of how triangles are sorted.

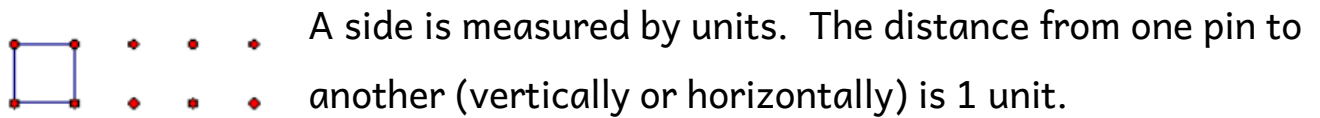
E.g.

- i. A, B and E are **right angled triangles**.
 C, D, F, G and H are **not right angled triangles**.

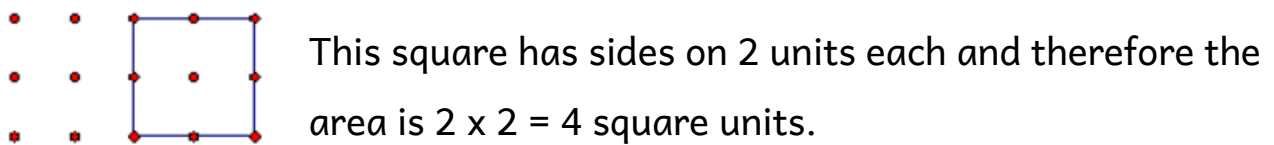
- ii. A, C, E, F and G have **one line of symmetry**.
 B, D and H have **no lines of symmetry**.

- iii. A, B, C, E, F and G are triangles with **acute angles**.
 D and H are triangles with **one obtuse angle**.

Measuring sides/perimeter and area on a geoboard



The square above has sides of 1 unit each and therefore the area is $1 \times 1 = 1$ square unit.



Task 3 Order your Triangles

Create 5 different triangles.

Find the area of each triangle you have made.

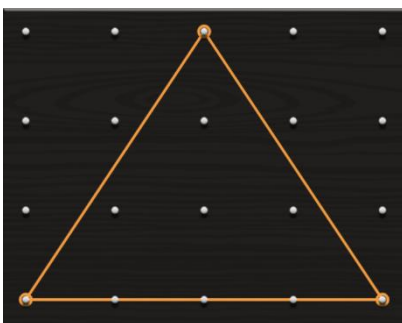
Put your triangles in order of area.

If you think there any two are the same, try to create another triangle with a larger or smaller area.

E.g.: Triangle A = $\frac{1}{2}$ sq. unit

Triangle B/C/H = 1 sq. unit

Triangle E/F = 2 sq. units



To change area of Triangle C, I created a larger one.

Now the area for Triangle C is 6 square units.