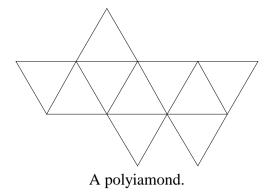
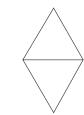
# **POLYIAMONDS**

A poly**iamond** is a shape formed by equilateral triangles joined fully along touching edges.



There is only one possible 'diamond' (a two triangle polyiamond).



The only "diamond".

Geo-Pro's equilateral triangles may be used to construct polyiamonds.

- 1. How many triamonds (3 triangles) are there?
- 2. Draw all possible tetriamonds (4 triangles).
- 3. Draw all possible pentiamonds (5 triangles).
- 4. Draw as many of the 12 hexiamonds as you can. Make up a name to describe each one.

### Extension.

How many heptiamonds (7 triangles) are there?

## Answers

## POLYIAMONDS

1. There is only one possible triamond.



2. The 3 tetriamonds.





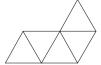


The 4 pentiamonds. 3.









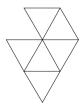
4. The 12 hexiamonds.

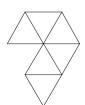


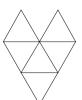


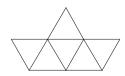


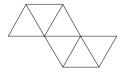






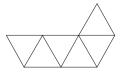












Extension.
There are 24 heptiamonds.