

TRIANGLES

MTH 3 16-a

Having investigated a range of methods, I can accurately draw 2D shapes using appropriate mathematical instruments and methods.

Pupils should be able to:

- Know how to name angles in diagrams, eg angle PQR
- Know the meaning of *acute*, *obtuse*, *reflex* for angles
- Know that a straight line angle is 180°
- Know that the angle sum of a triangle is 180°
- Calculate missing angles using the angle-sum, or angles making a straight line, or angles round a point
- Know the meaning of *isosceles*, *equilateral*, and be able to name triangles appropriately.

PUPILS SHOULD COMPLETE THE FOLLOWING EXERCISE AND ASSESS THEIR PROGRESS BY TICKING ONE OF THE OPTIONS FOR EACH TOPIC IN THE TABLE BELOW

| | DEVELOPING | CONSOLIDATING | SECURE |
|--|------------|---------------|--------|
| Types of triangles QUESTION 1 | | | |
| Naming angles QUESTION 2 | | | |
| Finding the missing angle size QUESTIONS 3 - 4 | | | |

SELF EVALUATION EXERCISE

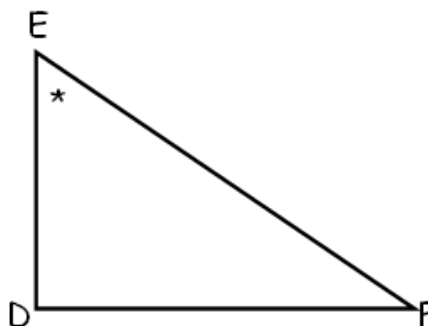
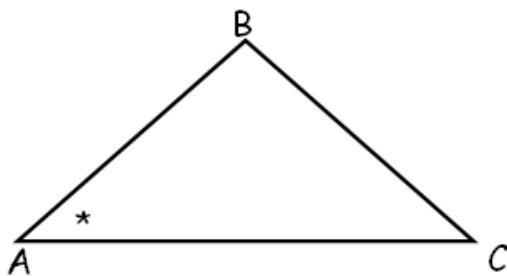
DATE DUE _____

1. Using all the words in the word bank, create four sentences describing the following types of triangles;

Equilateral
Right-Angled
Isosceles
Scalene

| | | | |
|------------|----------------------|-------------------------------|-------------------------------|
| Word Bank: | 90° angle | All sides are equal in length | Two sides are equal in length |
| | All angles are equal | | Two angles are the same size |

2. Using three letters, name the marked angles in the triangles.



3. Sketch a triangle named PQR where $\angle PQR = 35^\circ$ and $\angle QPR = 37^\circ$. What is the size of $\angle PRQ$?

4. Calculate the size of the marked angle.

