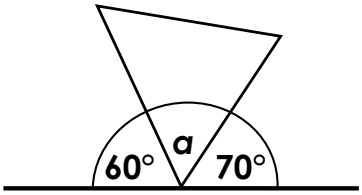
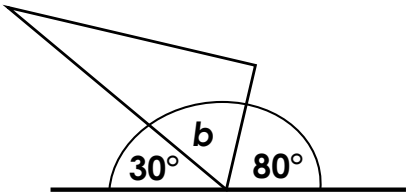
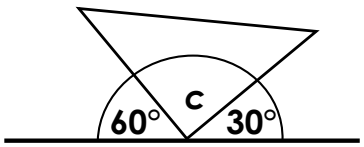
Angles in a Triangle 1

1. Match each missing angle to the correct answer below.





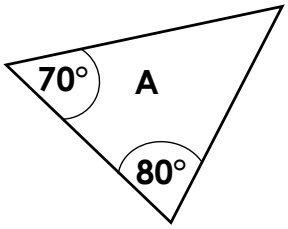


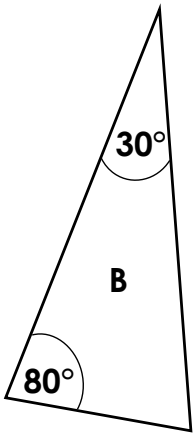
70°	90°	50°

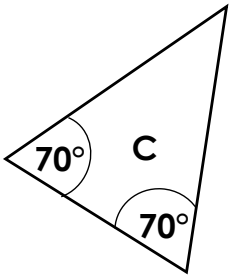
Triangles not drawn to scale.

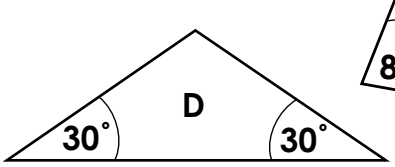
VF
HW/Ext

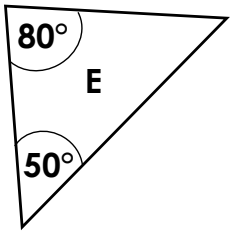
2. Calculate the missing angles, then sort each triangle into the correct place on the table.











Scalene	Isosceles

Triangles not drawn to scale.

VF
HW/Ext

3. I have drawn a triangle.

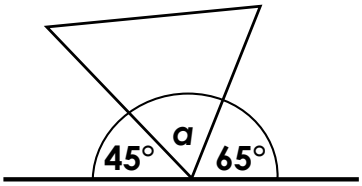
- **Angle x measures 70°.**
- **The other two angles are multiples of 10.**

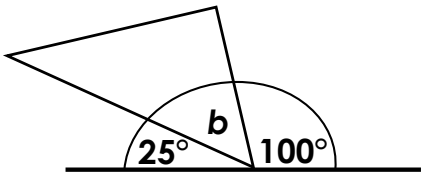
What could angles *x* and *y* be? List 5 possible combinations.

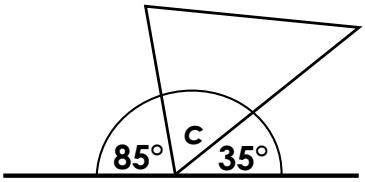
RPS
HW/Ext

Angles in a Triangle 1

4. Match each missing angle to the correct answer below.





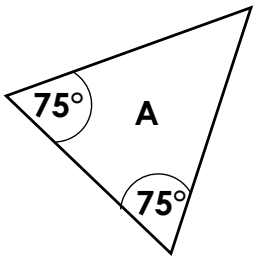


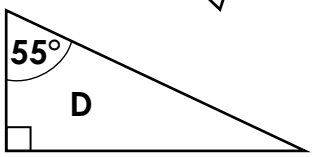
60°	70°	55°

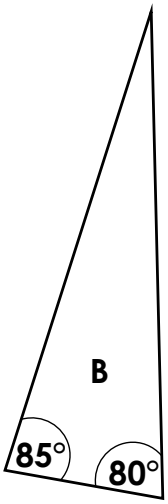
Triangles not drawn to scale.

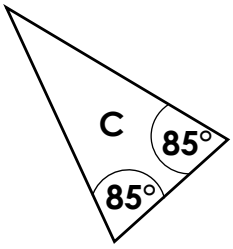
VF
HW/Ext

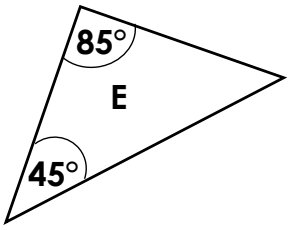
5. Calculate the missing angles, then sort each triangle into the correct place on the table.











Scalene	Isosceles

Triangles not drawn to scale.

VF
HW/Ext

6. I have drawn a triangle.

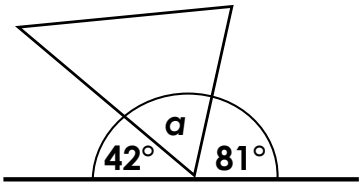
- **Angle x measures 65°.**
- **Angles y and z are acute.**
- **The two missing angles are multiples of 5.**

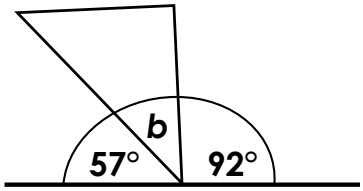
What could angles x and y be? List 6 possible combinations.

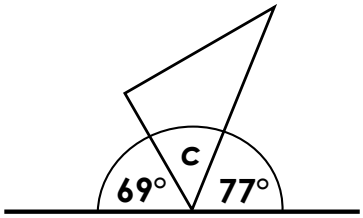
RPS
HW/Ext

Angles in a Triangle 1

7. Match each missing angle to the correct answer below.





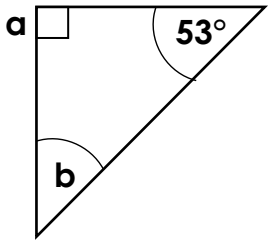


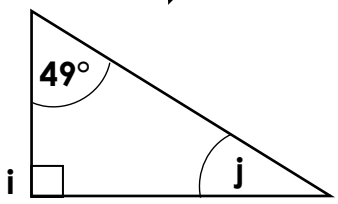
34°	31°	57°

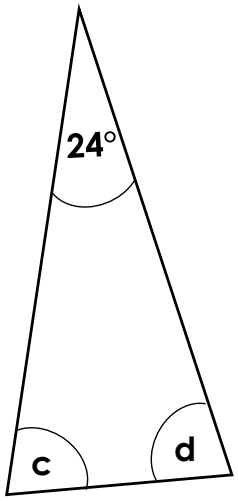
Triangles not drawn to scale.

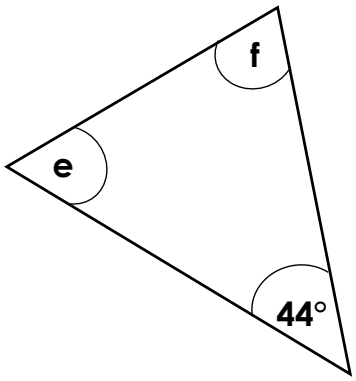
VF
HW/Ext

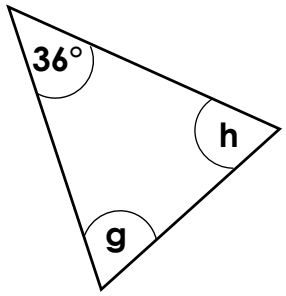
8. Calculate the missing angles. Triangles are either right angled or isosceles.











Triangles not drawn to scale.

VF
HW/Ext

9. I have drawn a triangle.

- **Angle x measures 26°.**
- **Angle *y* is obtuse.**
- **Angle z is acute.**

What could angles x and *y* be? List 6 possible combinations.

RPS
HW/Ext

Homework/Extension
Angles in a Triangle 1

Developing

1. a = 50°, b = 70°, c = 90°
2. A = 30°, B = 70°, C = 40°, D = 120°, E = 50°

Scalene	Isosceles
A	C
B	D
	E

3. Possible combinations include: 100° and 10°; 90° and 20°; 80° and 30°; 70° and 40°; 60° and 50°.

Expected

4. a = 70°, b = 55°, c = 60°
5. A = 30°, B = 15°, C = 10°, D = 35°, E = 50°

Scalene	Isosceles
B	A
D	C
E	

6. Possible combinations include: 85° and 30°; 80° and 35°; 75° and 40°; 70° and 45°; 65° and 50°; 60° and 55°

Greater Depth

7. a = 57°, b = 31°, c = 34°
8. a = 90°, b = 37°, c and d = 78°; e and f = 68°; g and h = 72°; i = 90° and j = 41°.
9. Any combination where y and z total 154° with y being obtuse and z being acute.
Possible combinations include: y = 100° and z = 54°; y = 99° and z = 55°;
y = 98° and z = 56°; y = 97° and z = 57°; y = 96° and z = 58°; y = 95° and z = 59°.