

Angles in a Triangle 1

Angles in a Triangle 1

1a. Use these clues to draw a triangle.

- The triangle has three sides that are each 5cm long.
- Angles A, B and C are equal to each other.

What kind of triangle have you drawn?



PS

1b. Use these clues to draw a triangle.

- Two sides of the triangle are each 3cm long.
- One angle is 90 degrees.
- Two angles are 45 degrees each.

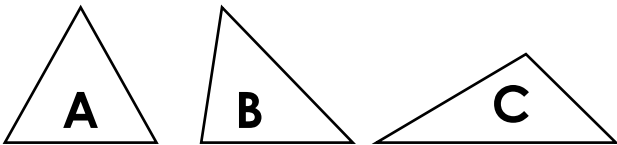
What kind of triangle have you drawn?



PS

2a. Match each triangle to the best description.

- This triangle has one obtuse angle.
- This triangle has three equal sides and three equal angles.
- This triangle has three acute angles.

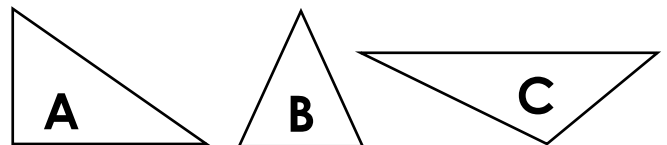


Triangles not drawn to scale.

PS

2b. Match each triangle to the best description.

- This triangle has a right angle.
- This triangle has one angle that is greater than 90 degrees.
- This triangle is an isosceles triangle.



Triangles not drawn to scale.

PS

3a. Theodora says,

I have drawn an equilateral triangle. One side is 10 centimetres long and the other two sides are each 9 centimetres long.

Is she correct? Explain why or why not.



R

3b. Kenneth says,

I have drawn a scalene triangle. All the sides are different lengths and one of the angles is a right angle.

Is he correct? Explain why or why not.



R

Angles in a Triangle 1

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4a. Use these clues to draw a triangle.

- The triangle has a base of 4cm.
- Angle A is 50° .
- Angles B and C are the same.

What kind of triangle have you drawn?



PS

4b. Use these clues to draw a triangle.

- The triangle has a base of 3cm.
- Angle A is 80° .
- Angle B is half the size of Angle A.

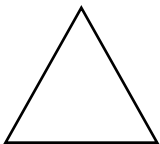
What kind of triangle have you drawn?



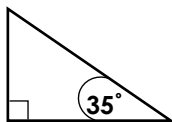
PS

5a. Match each triangle to the best description.

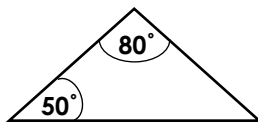
- The missing angle in this triangle is 50° .
- The missing angle in this triangle is a multiple of 5.
- This triangle has three 60° angles.



A



B



C

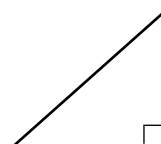


Triangles not drawn to scale.

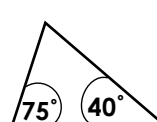
PS

5b. Match each triangle to the best description.

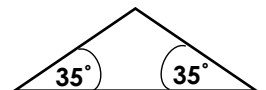
- The two missing angles in this triangle equal 90° .
- The missing angle in this triangle is obtuse.
- This triangle has no equal angles.



A



B



C



Triangles not drawn to scale.

PS

6a. Javier says,

I have drawn an isosceles triangle. One side is 10 centimetres long and the angles measure 35° , 45° and 100° .

Is he correct? Explain why or why not.



R

6b. Winona says,

I have drawn an equilateral triangle. All the sides are the same length and all the angles are obtuse.

Is she correct? Explain why or why not.



R

Angles in a Triangle 1

Angles in a Triangle 1

7a. Use these clues to draw a triangle.

- The triangle has two sides of equal lengths.
- Angle C is 56° .
- Angles A and B are the same.

What kind of triangle have you drawn?



PS

7b. Use these clues to draw a triangle.

- The triangle has no equal sides.
- Angle A is 120° .
- Angle B is 5 times as big as Angle C.

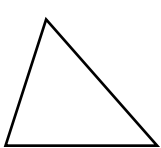
What kind of triangle have you drawn?



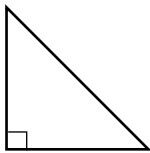
PS

8a. Match each triangle to the best description.

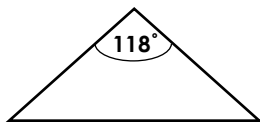
- The missing angles in this triangle add to make 90° .
- This obtuse isosceles triangle is missing two 31° angles.
- This triangle has no angles greater than 90° .



A



B



C

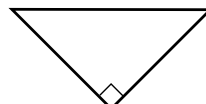


Triangles not drawn to scale.

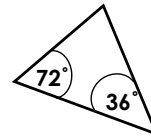
PS

8b. Match each triangle to the best description.

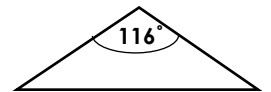
- This triangle's missing angle is twice as big as its smallest marked angle.
- This triangle has one angle that is neither acute nor obtuse.
- This triangle is missing two equal acute angles.



A



B



C



Triangles not drawn to scale.

PS

9a. Alfie says,

I have drawn a scalene triangle. One side is 4 centimetres long and the angles measure 47° , 63° and 69° .

Is he correct? Explain why or why not.



R

9b. Kiera says,

I have drawn an isosceles triangle. All the sides are multiples of 2 and the angles are 46° , 23° and 111° .

Is she correct? Explain why or why not.

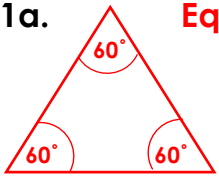


R

Varied Fluency Angles in a Triangle 1

Developing

1a. **Equilateral triangle**

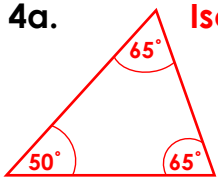


2a. 1C, 2A, 3B

3a. Theodora is incorrect. All three sides of an equilateral triangle must be equal. She has drawn an isosceles triangle.

Expected

4a. **Isosceles triangle**

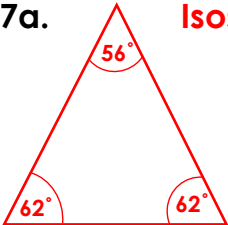


5a. 1C, 2B, 3A

6a. Javier is incorrect. He has drawn a scalene triangle.

Greater Depth

7a. **Isosceles triangle**



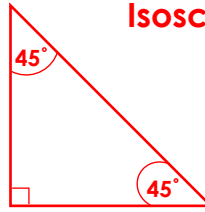
8a. 1B, 2C, 3A

9a. Alfie is incorrect. His angles only total 179 degrees, not 180 degrees.

Varied Fluency Angles in a Triangle 1

Developing

1b. **Isosceles triangle**

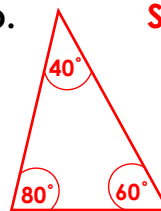


2b. 1A, 2C, 3B

3b. Kenneth is correct, a right-angled triangle can be scalene as long as all the sides are different lengths.

Expected

4b. **Scalene triangle**

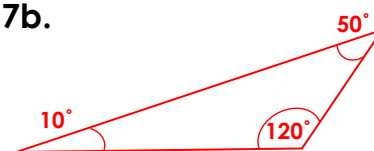


5b. 1A, 2C, 3B

6b. Winona is incorrect. The angles in a triangle cannot all be obtuse.

Greater Depth

7b. **Scalene triangle**



8b. 1B, 2A, 3C

9b. She is incorrect. Two sides and two angles must be equal in an isosceles triangle. She has drawn a scalene triangle.