

## Maths Challenge Answers

$$\text{Mystery} - \frac{9}{25}$$

$$\text{Sci-Fi} - \frac{6}{25}$$

$$\text{Fantasy} - \frac{9}{50}$$

$$\text{History} - \frac{3}{25}$$

$$\text{Biography} - \frac{1}{10}$$

### Workings out

We need to turn the book genres into fractions. To do that we need to know how many books there are altogether.

Add together the total number of books.

$$36 + 24 + 18 + 12 + 10 = 100$$

There are 36 Mystery books which means 36 out of 100 books.

$$\text{Mystery} \frac{36}{100}$$

We can simplify this by dividing both numbers by 4.

$$36 \div 4 = 9$$

$$100 \div 4 = 25$$

$$\text{Therefore, Mystery} = \frac{9}{25}$$

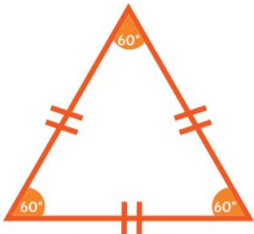
Repeat the same method for the other genres.

Fantasy can only be divided by 2.

Biography can be divided by 10.

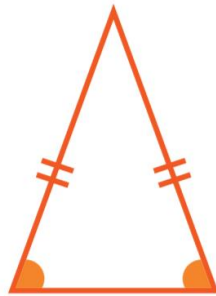
## Shape Answers

**equilateral**



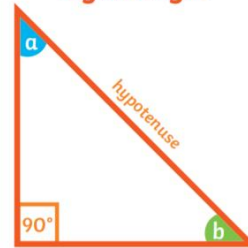
3 equal sides  
3 equal angles ( $60^\circ$ )

**isosceles**



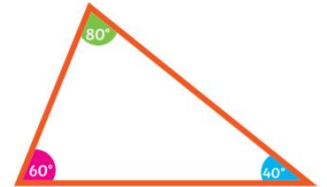
2 equal sides  
2 equal angles

**right angle**

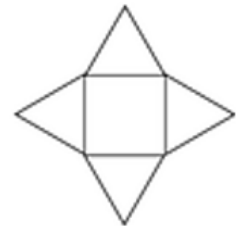
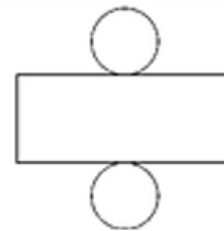
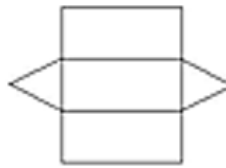
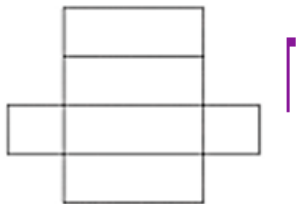
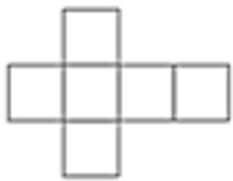


One angle is a right angle ( $90^\circ$ )  
Two other angles add up to  $90^\circ$   
The longest side is called the hypotenuse.

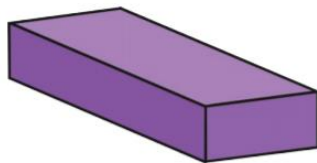
**scalene**



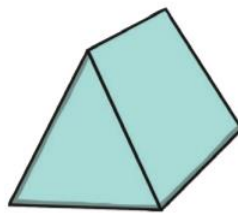
All sides are different  
All angles are different.



**cube**



**cuboid**



**triangular prism**



**cylinder**



**pyramid**