







WALT understand different types of angles and measure them

Success Criteria I know there are different types of angles and how to measure them

Takedown notes and draw and label

Angle type	Diagram	Description
Acute angle		between 0° and 90°
Right angle		equal to 90°
Obtuse angle		between 90° and 180°
Straight angle (line)		equal to 180°
Reflex angle		between 180° and 360°
Revolution		equal to 360°

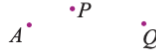
[Types of Angles](#) (This is to view from home in your own time)

You need to know the basics of arms, angles and vertex

Points, lines, intervals, rays and angles

We often use a dot to represent a **point** and name the point using a capital letter.

The points A , P and Q are shown.



A **line** is determined by any two points. Hence a line is named using any two points on it.

This line could be named AP or PA .



A line extends indefinitely in both directions. This is sometimes emphasised using arrowheads as shown. We cannot measure the length of the line.



An **interval** is a section of a straight line. The interval AP is shown. It is the set of points between and including the endpoints A and P .

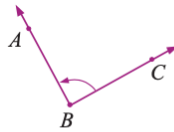


An interval has finite length. Hence we can measure the length of an interval. Sometimes an interval is referred to as a **line segment**.

A **ray** is a part of a straight line that starts at a point and continues in one direction only. The ray shown would be named AP , as A is the endpoint of the ray. Always begin with the endpoint when naming a ray.



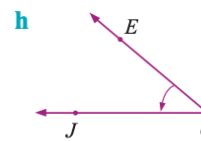
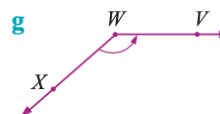
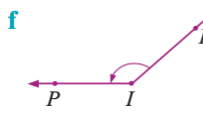
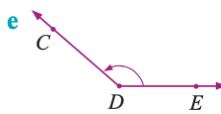
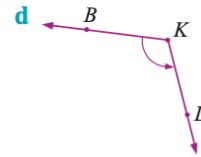
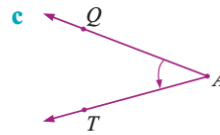
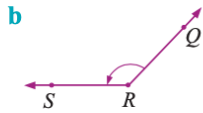
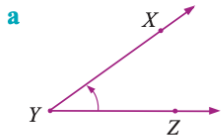
An **angle** is formed by two rays sharing a common endpoint. The diagram below shows the angle formed by the rays BA and BC . The common endpoint, B , is called the **vertex** and the rays BA and BC are called the **arms** of the angle.



The size of the angle is the amount that the ray BC must be turned through to meet the ray BA .

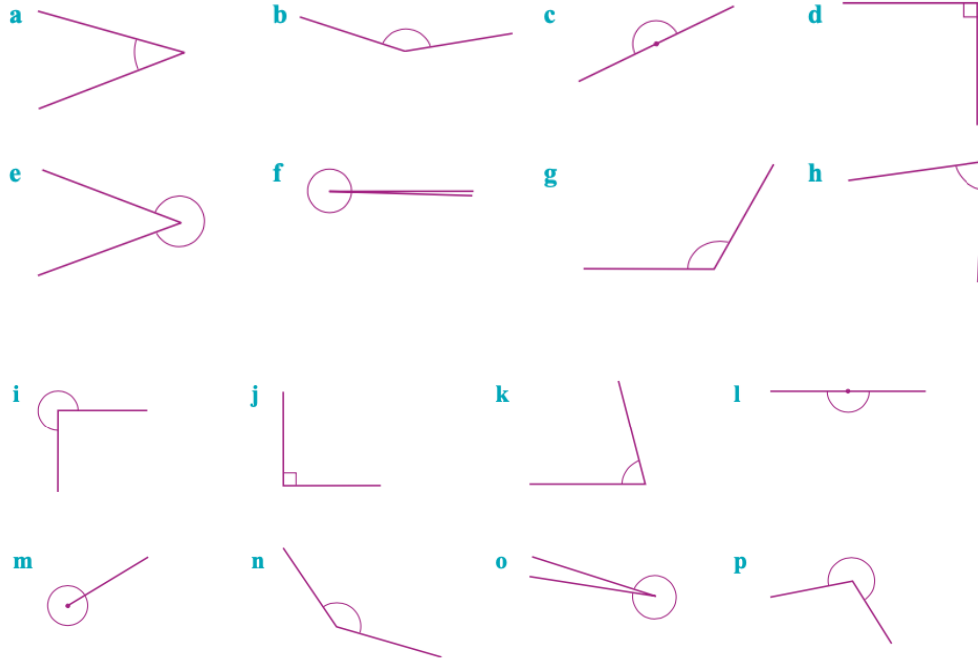
Take turns to give your answers

1 For each angle name the: **i** vertex **ii** arms **iii** angle.



EXAMPLE 2

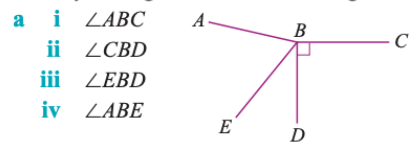
1 Classify the following angles.



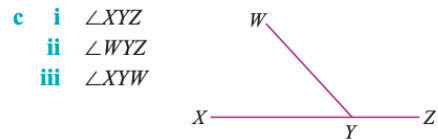
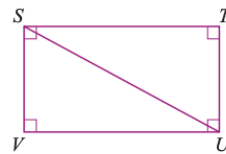
2 Classify these angles given their sizes.

- | | | | | |
|----------------------|----------------------|----------------------|----------------------|----------------------|
| a 58° | b 175° | c 90° | d 108° | e 2° |
| f 89° | g 360° | h 149° | i 241° | j 93° |
| k 180° | l 224° | m 22° | n 305° | o 136° |

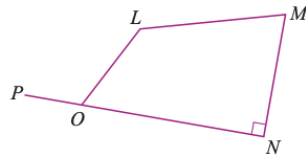
3 Classify the angles shown in these diagrams.



- b**
- i** $\angle V$
 - ii** $\angle T$
 - iii** $\angle VSU$
 - iv** $\angle TUS$



- d**
- i** $\angle L$
 - ii** $\angle M$
 - iii** $\angle N$
 - iv** $\angle LOP$
 - v** $\angle LON$
 - vi** $\angle NOP$



[How to measure angles](#)

[Activity to measure angles](#) all work on this

[Estimating Angles](#)