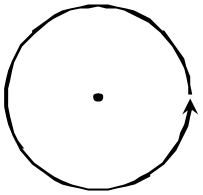
Angles

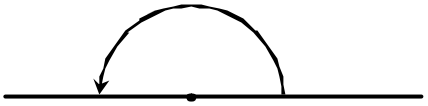
Data Sheet

Degrees

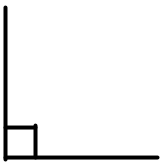
Angles are measured in degrees. There are:



360°
at a point



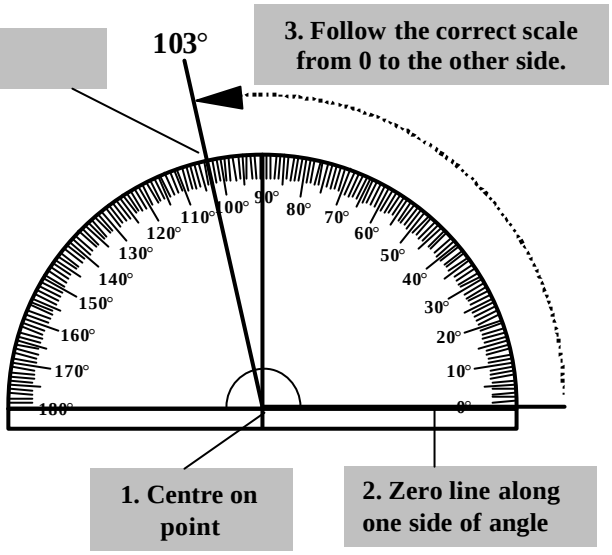
180°
on a straight line



90°
in a right angle

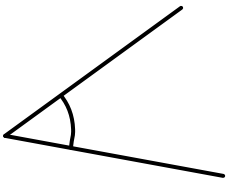
To measure an angle:

1. Put the centre of your protractor on the point of the angle.
2. Lie a zero line of the protractor over one side of the angle.
3. Follow the correct scale round the edge of the protractor from 0 to the other side of the angle.
4. Read the size of the angle.
   Take care to use the correct scale!

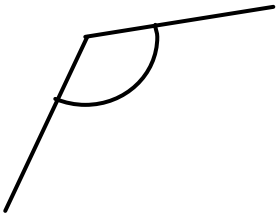


N.B. There are usually two scales - only one is shown on this diagram.

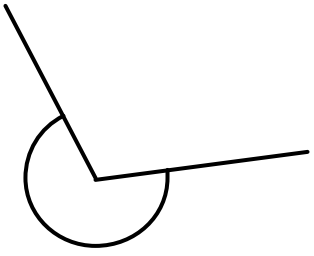
Types of angles



An **acute** angle is **less than 90°**



An **obtuse** angle is **more than 90° but less than 180°**



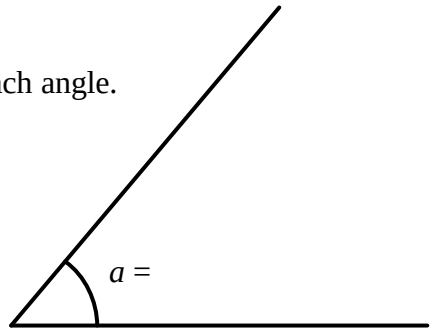
A **reflex** angle is **more than 180°**

Angles

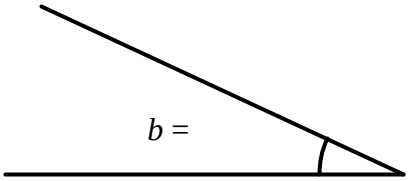
Worksheet

Your name: ……..

Measure each angle.



a =



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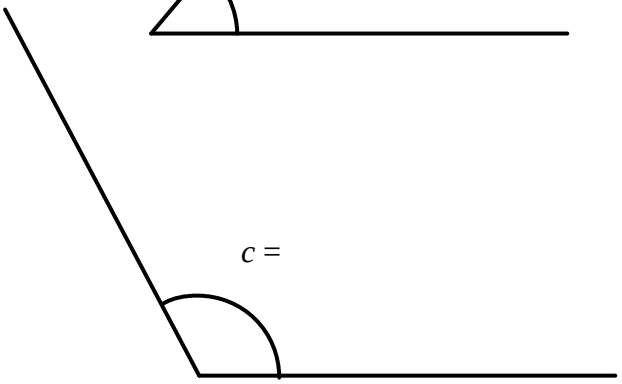

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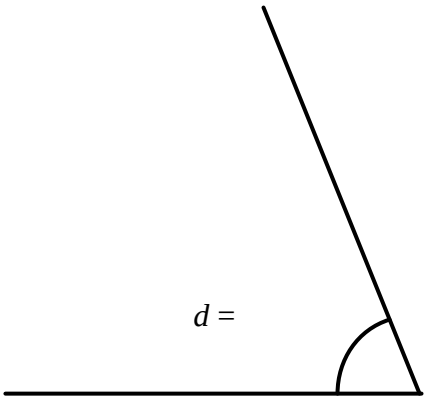
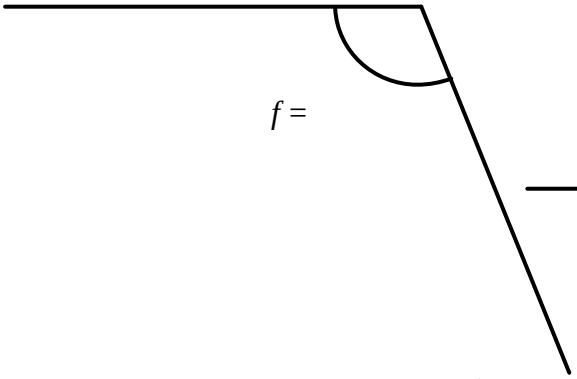
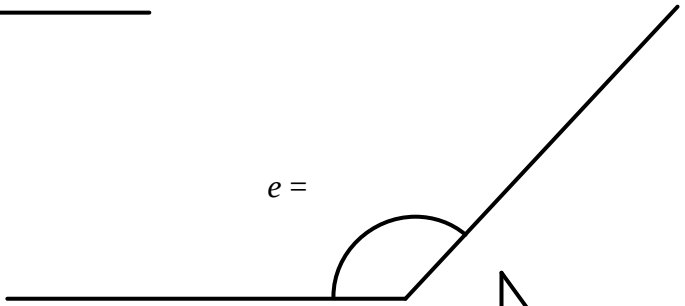


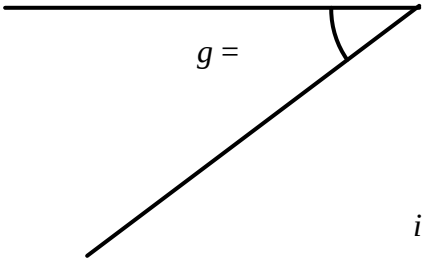
d =



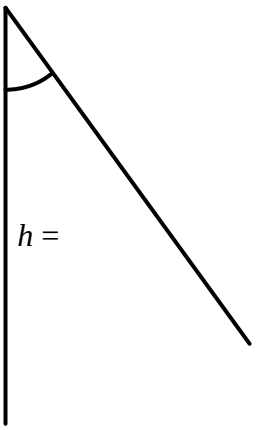
f =



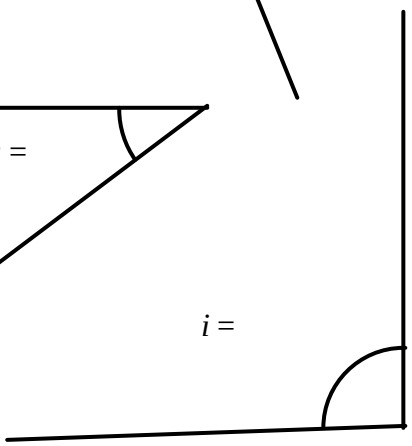
e =



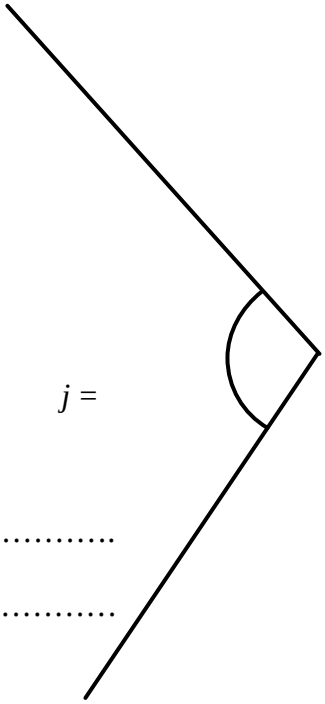
g =



h =



i =

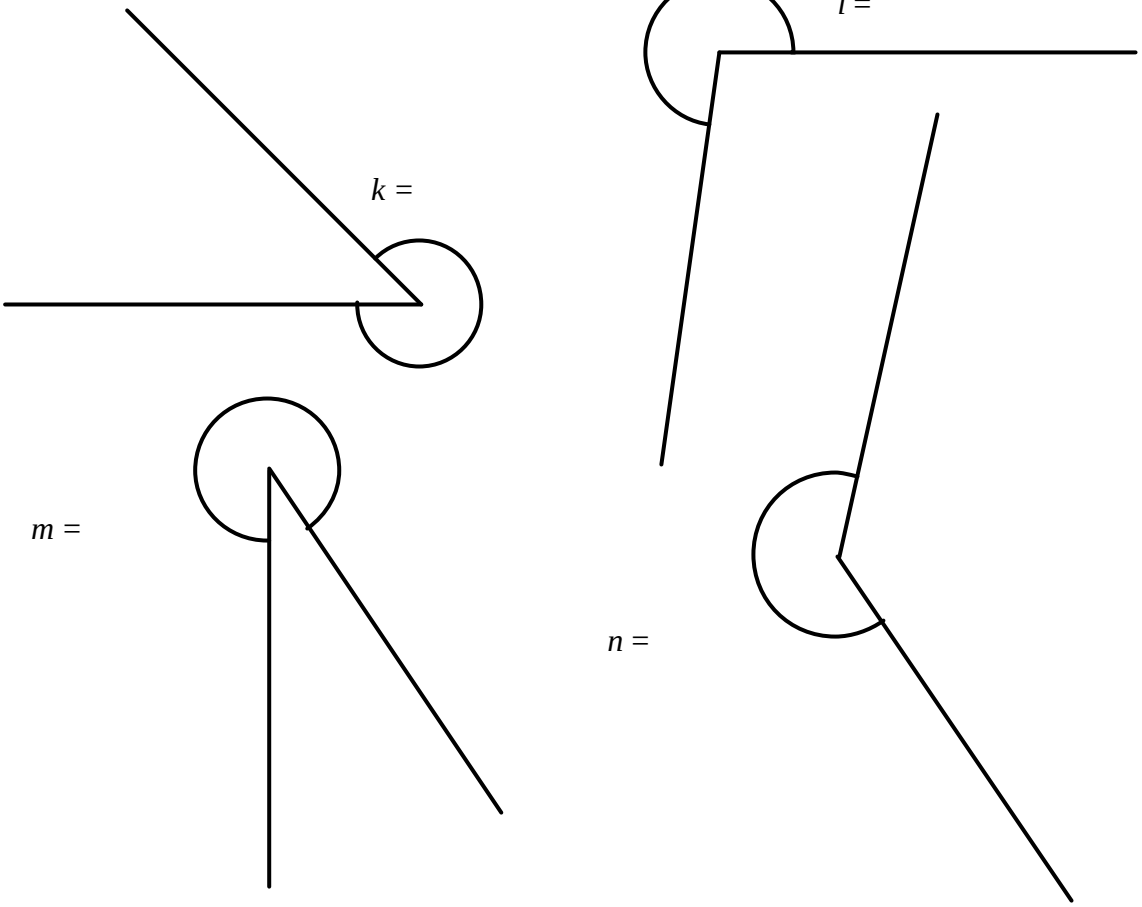


j =

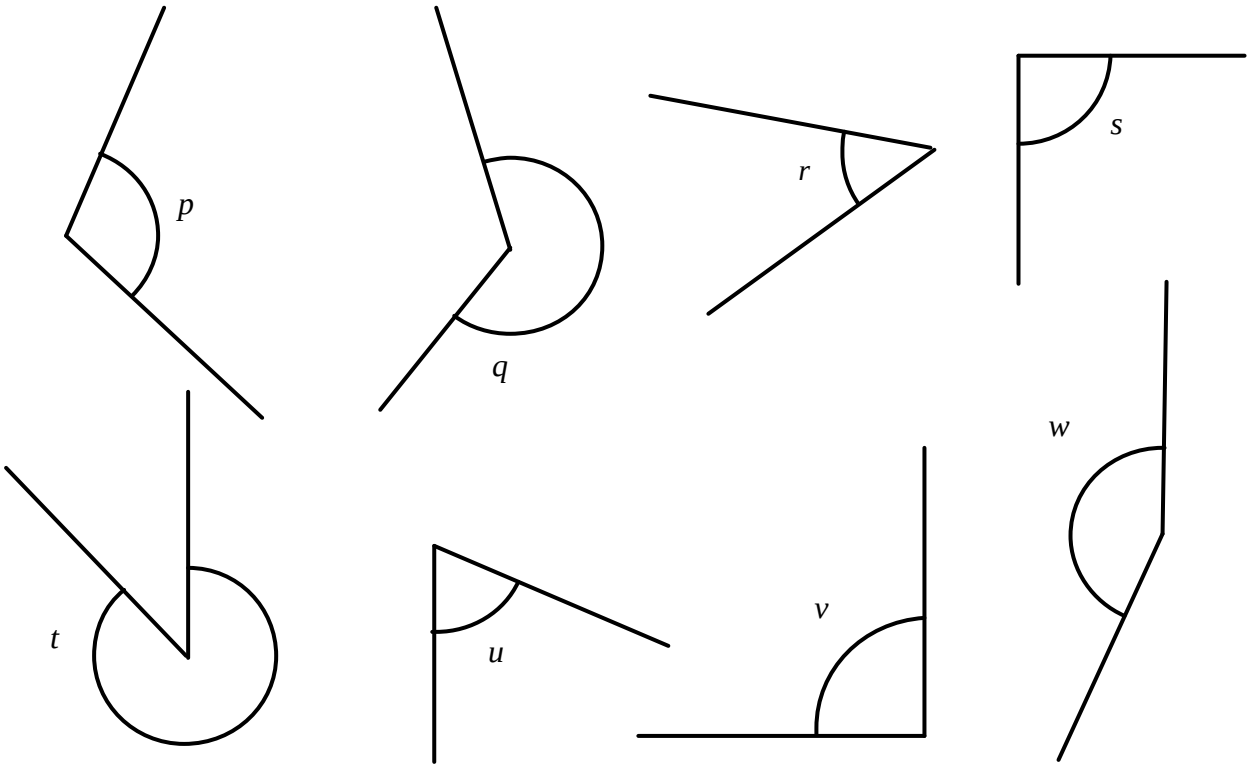
Which of these angles are acute? …….

Which are obtuse? ……

Find the size of these reflex angles.



Without measuring, label each angle below: **right** angle, **acute** angle, **obtuse** angle or **reflex** angle.



Check your answers by measuring.

Teacher Notes

Unit Foundation Level, Working in 2 and 3 dimensions

Skills used in this activity
- measuring angles
- classifying angles

Notes
Students can use the Data Sheet (Page 1) for reference whilst measuring and classifying the angles on the Worksheet (Pages 2 and 3). An accompanying Powerpoint presentation with the same name can be used as an introduction or for revision later.

Answers (Allow ± 1°)

$a = 50°$	$b = 25°$	$c = 118°$	$d = 68°$	$e = 133°$
$f = 112°$	$g = 37°$	$h = 36°$	$i = 92°$	$j = 104°$

Acute angles: *a, b, d, g, h*
Obtuse angles: *c, e, f, i, j*

$k = 315°$	$l = 262°$	$m = 326°$	$n = 226°$

p obtuse angle	*q* reflex angle	*r* acute angle	*s* right angle
t reflex angle	*u* acute angle	*v* right angle	*w* obtuse angle

Approximate values:

$p = 110°$	$q = 236°$	$r = 47°$	$s = 90°$
$t = 316°$	$u = 67°$	$v = 90°$	$w = 155°$