

Identifying Angles



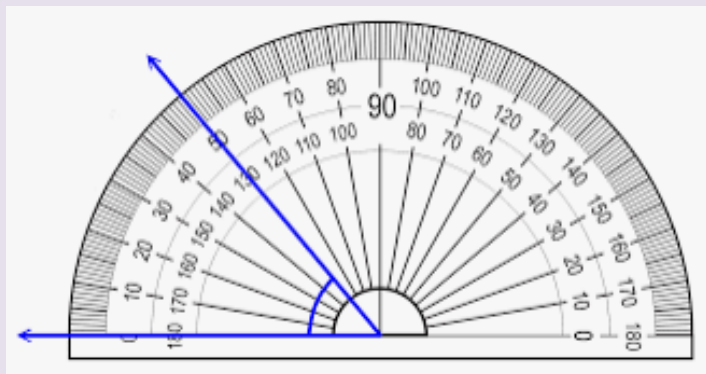
**Acute angles**  
Any angles that measure less than  $90^\circ$



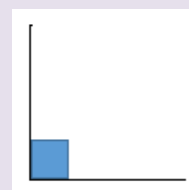
**Obtuse angles**  
Any angles that measure more than  $90^\circ$  and less than  $180^\circ$



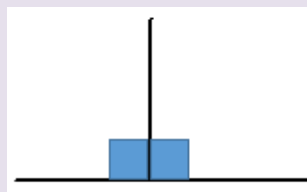
**Reflex angles**  
Any angles that measure more than  $180^\circ$



Protractors are used to measure angles

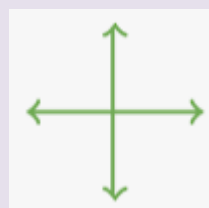
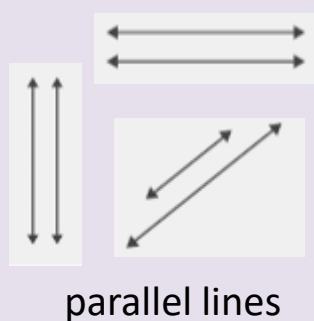
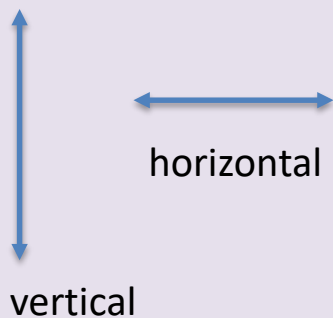


**Right angle**  
An angle that measures exactly  $90^\circ$

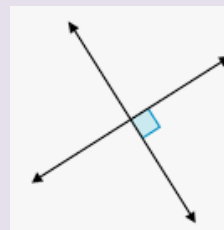


**A Straight line**  
is equal to 2 right angles measuring  $180^\circ$

Types of Lines



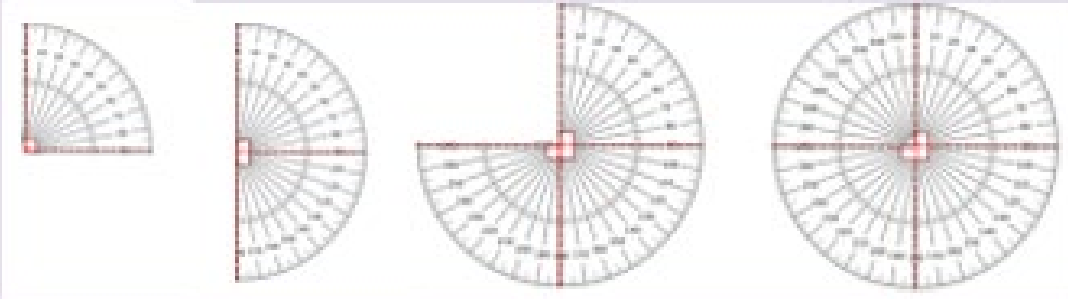
**perpendicular lines**



Vocabulary

<b>angles</b>	acute, obtuse, reflex, right-angle
<b>polygon</b>	2D shapes formed of straight lines
<b>regular polygons</b>	Have equal sides and equal angles
<b>irregular polygons</b>	Do not have equal sides or equal angles
<b>vertical lines</b>	Lines in an up-down direction
<b>horizontal lines</b>	Lines in a left-right direction
<b>parallel lines</b>	Lines that are always the same distance apart
<b>perpendicular lines</b>	Lines that are at right angles to each other
<b>face</b>	A flat surface on a solid shape
<b>edge</b>	A line segment between faces
<b>vertex</b>	A corner
<b>apex</b>	The highest part forming a point

Measuring Angles



$\frac{1}{4}$  turn

$\frac{1}{2}$  turn

$\frac{3}{4}$  turn

full turn

1 right angle

2 right angles

3 right angles

4 right angles

$90^\circ$

$180^\circ$

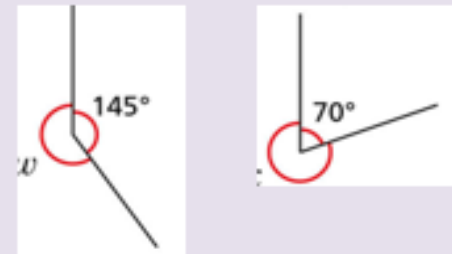
$270^\circ$

$360^\circ$

Angles on a straight line total  $180^\circ$



Angles around a point total  $360^\circ$



Regular and Irregular polygons

Regular	Irregular

A **polygon** is a 2 dimensional (2D) shape formed with straight lines.

**Regular polygons** have sides that are equal and angles that are equal.

In **irregular polygons**, sides and angles are not equal.