


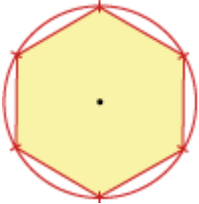


CLEVER COMPASSES

A pair of compasses is not only useful for drawing circles. You can also use compasses to help draw other shapes. Use the widgets from this lesson or the instructions below to construct various 2D shapes.

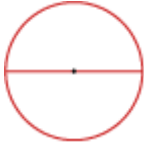
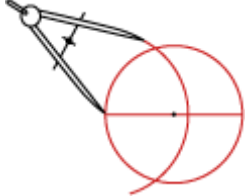
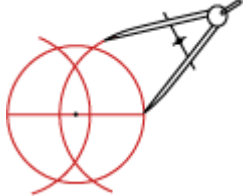
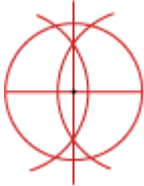
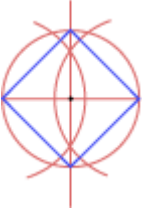
TASK 1

Regular hexagon

<p>Draw a large circle using your compasses.</p> 	<p>Keeping the same radius on the compasses, put the point on the circle and make a mark on the circle.</p> 	<p>Move the point to the mark and make the second mark.</p>  <p>Repeat until you return to the beginning.</p>	<p>Join the marks to form a regular hexagon.</p> 
---	--	---	---

TASK 2


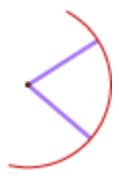
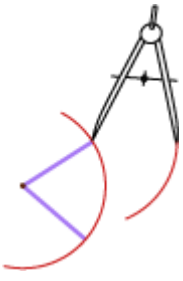
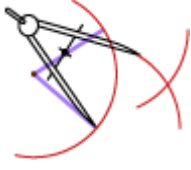
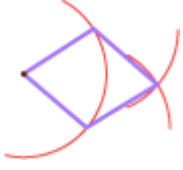
Regular quadrilateral

<p>Draw a circle. Draw a diameter across the circle.</p> 	<p>Put the point on the end of your diameter, open your compasses wider than the radius and draw a large arc.</p> 	<p>With the same width on the compasses draw another large arc from the other end of the diameter.</p> 
<p>Draw a line through the two places where your arcs cross so that it cuts your circle.</p> 	<p>Join the shape as shown.</p> 	<p>You have drawn a regular quadrilateral. What is its more common name?</p> <hr/>

TASK 3

Mystery shape

Follow these steps carefully to draw a special quadrilateral.

<p>Mark a dot for the centre of your circle and draw a large arc.</p> 	<p>Draw two lines from the dot to the arc (called <i>radiuses</i> or <i>radii</i>).</p> 	<p>Do not change the width of your compasses. Put the point of your compasses at the end of one line and draw a large arc.</p> 
<p>Put the point on the end of the other line and draw another arc to cross the other.</p> 	<p>Join up the shape as shown.</p> 	<p>What shape have you drawn?</p> <p>_____</p>