

Loci - What They Are



Key idea

A **locus** is the set of **all** points that follow a rule.

The three main rules

One fixed point → **circle**.

Two points → **perpendicular bisector**.

Two lines → **angle bisector**.

Example

Points exactly 4 cm from P form a circle, centre P , radius 4 cm.

Common mistake

Do not give just one point. A locus is the **whole set** of points that fit the rule.

 = **copy this into your book.** Boxes without a pencil are just to read.

Loci - Solving a Question



Method



1. Turn each condition into a standard locus.
2. Draw each one carefully (keep the compass width fixed).
3. Where the loci **meet** are the answers.

Example: two conditions



Same distance from A and B, **and** 5 cm from A:
draw the perpendicular bisector of AB, then the circle centre A radius 5 cm.

Common mistake

Watch the wording. 'Exactly 5 cm from P' is the circle; 'within 5 cm' shades the inside as well.