MATHS – YEAR 11 – UNIT 20

1. Tier 3 Vocabulary

Estimate	To find something close to the correct answer.
≈	Approximately equal to
Perpendicular	Perpendicular lines are at right angles. There is a 90° angle between them.
Bisector	To cut exactly in half.
Translation	Translate means to move an a object. The object does not change size or orientation.
Vector	Describes how an object is translated

2. Translations

A vector of $\begin{pmatrix}2\\3\end{pmatrix}$ translates an object 2 right and 3 up.

A vector of $\begin{pmatrix}-1\\-5\end{pmatrix}$ translates an object 1 left and 5 down.

3. Significant figures

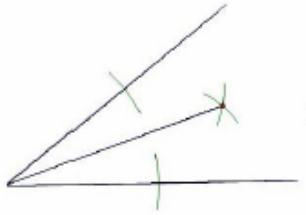
The significant figures of a number are the digits which carry meaning (i.e. are significant) to the size oi the number.
The first significant figure of a number cannot be zero, if the number is greater than or equal to 1.
In a number with a decimal, trailing zeros are not significant.

4. Command Words

Estimate the value of (used with a calculation)	Use approximations to work out a value. Unless told otherwise, students should round the given values to 1 significant figure.
Show that…	Give every step of a process that will lead to the required outcome.
Factorise (fully)	Take out any common factors of an expression or convert a quadratic expression into two linear factors. This should always be done fully, even if that word is absent from the instruction. Use of the word 'fully' is a hint that more than one factor can be taken out.
Why	Give a calculation and/or written evidence to support the given statement.
Solve	Find the value(s) that satisfy a given equation or inequality.
Construct	Draw accurately. If told to use compasses, all construction arcs and lines should be shown.

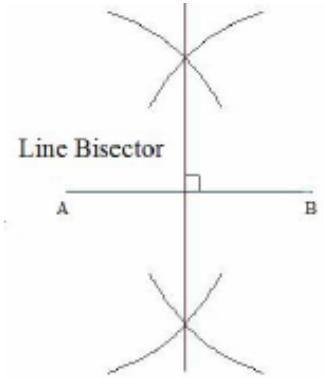
5. Constructions

Angle Bisector: Cuts the angle in half.

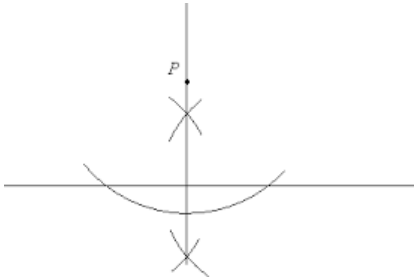


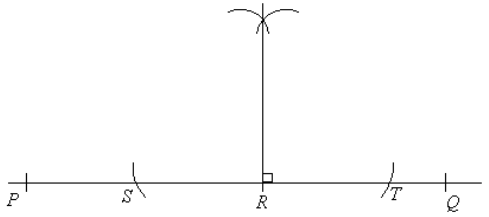
Angle Bisector

Perpendicular Bisector: Cuts a line in half and at right angles.



The perpendicular distance from a point to a line is the shortest distance to that line.



6. Constructions

Perpendicular from a line a point on a line