## Level 3 Diploma in Bench Joinery Progression Assignment

Please read and complete the following questions to include a full and comprehensive answer to ALL sections.

What do you feel that you will need to demonstrate to make a successful Level 3 Student?

Describe the different techniques and methods of confirming and communicating work methods to relevant people.

Describe different types of information and how they are interpreted in relation to:

Drawings:

Specifications:

Schedules:

Method Statements:

Risk Assessments:

Manufactures Information:

Information and regulations governing buildings:

Setting Out Procedures

As a Joiner you will be required to work on complex joinery, this may include stairs with turns, curve headed doors and door frames, curved units and could include windows that are curved on plan. The advanced joiner will be required to set out, mark out and manufacture these items to a high degree of accuracy.

On the following page you will see guidance on how to set out a segmental arch, (you may have seen these above windows and doors in older properties).

- You are required to produce a segmental arch for a door frame.
- Draw the segmental arch to a suitable scale to fit onto A4 paper.
- Once drawn write the full size measurement of the radius required.
- When complete use the calculation to check the setting out.

The full size measurements are:

Width of door frame 942mm

Rise of arch 200mm.

You will need the following to enable you to complete this task:

A very sharp 2h/4h pencil.

1 pair of compasses (make sure they don't move whilst using them).

Ruler.

Calculator

Please leave all setting out and bisection marks on your drawing.

## Segmental arch

This shows the outline of a segmental arch. The method used to set out this arch is as follows:

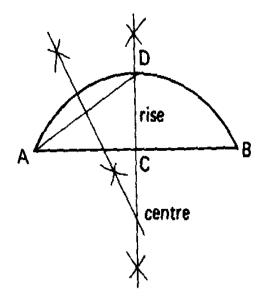
Draw line AB equal to the span and bisect it.

From C mark the rise. Let this be point D.

Draw line AD and bisect it. The point where the two bisections cross is the required centre.

With the radius set from the centre to A, the arc can be drawn.

A simple formula for segmental arches can be calculated thus: (0.5 x span)  $^2$  ÷ rise + rise ÷ 2 = radius or arch.



Page for Setting out Segmental Arch.

Name: