

RWBA Summer Work:

FACULTY: Design & Technology

HOD: Mrs Ferguson

DEPARTMENT: Engineering

HOD EMAIL: queries to svaughan@rwba.org.uk

Course: BTec Nationals Level 3 Engineering

Objective: Review of GCSE skills which form part of Engineering Maths Unit 1/Design a gadget phone holder

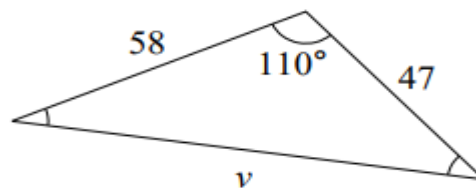
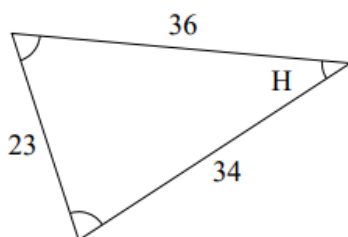
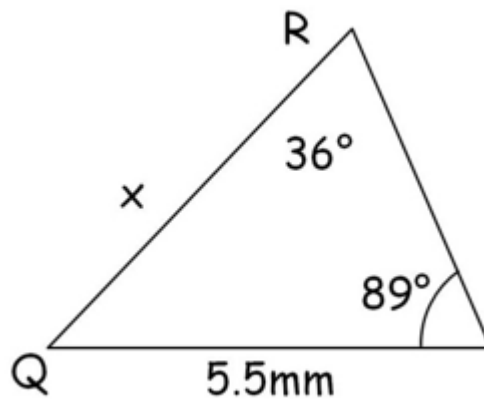
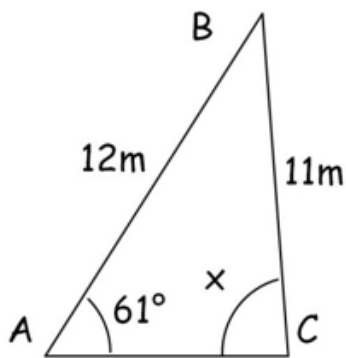
Activity: Calculations/dimensional design

Time to be allotted to this task: 2 hours maximum

NOTES: Work to be handwritten, Name on the top. Answers correct to 2 d.p.

TASK:

Use the sine and cosine rules to find the missing angle or side of the triangles



DOCUMENTS/USEFUL LINKS

Any GCSE revision book or website.

END RESULT:

Four complete calculations – techniques ready to apply to Engineering scenarios

HAND IN DATE: First lesson in Autumn Term

Phone Stand

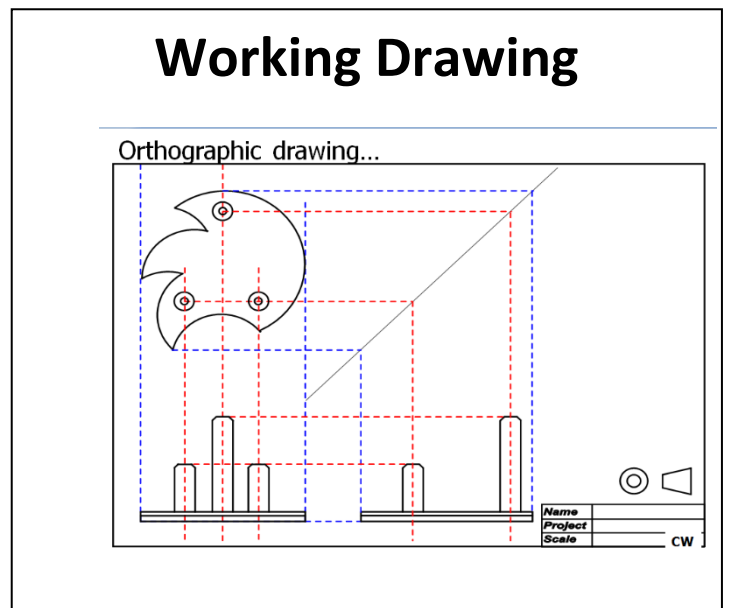
TASK:

You are a Design Engineer at RWBA Engineering Company. Your line manager (Mrs Day) has asked you to design a new gadget to help hold phone whilst you work.

You job over the summer break is to:

1. Design the shape of the new gadget – you may also want to model this to check it works.
2. Complete an orthographic drawing for your gadget to include dimensions so you are ready to begin practical on your first lesson back in September.
3. I have also created a booklet for you to work through to help develop your problem-solving skills, recap Level 2 materials, safety and manufacturing ready to start the course in September

DOCUMENTS/USEFUL LINKS TO HELP YOU:



END RESULT:

You will have produced an orthographic drawing with dimensions for a phone holder, that you will manufacture in the workshop in September.

HAND IN DATE: First lesson in Autumn Term