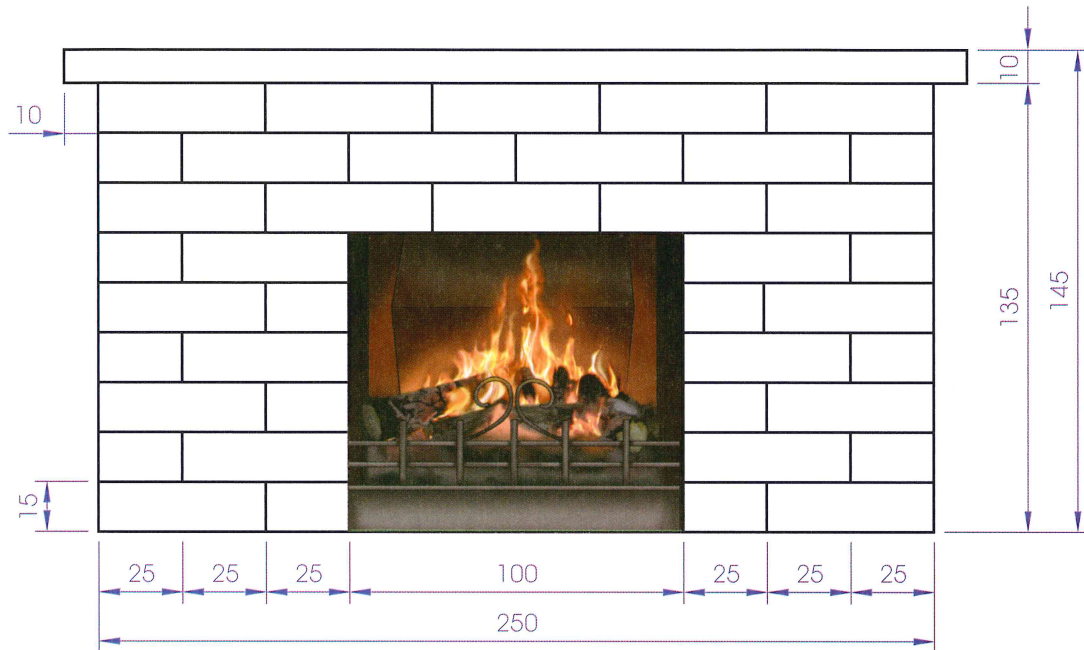
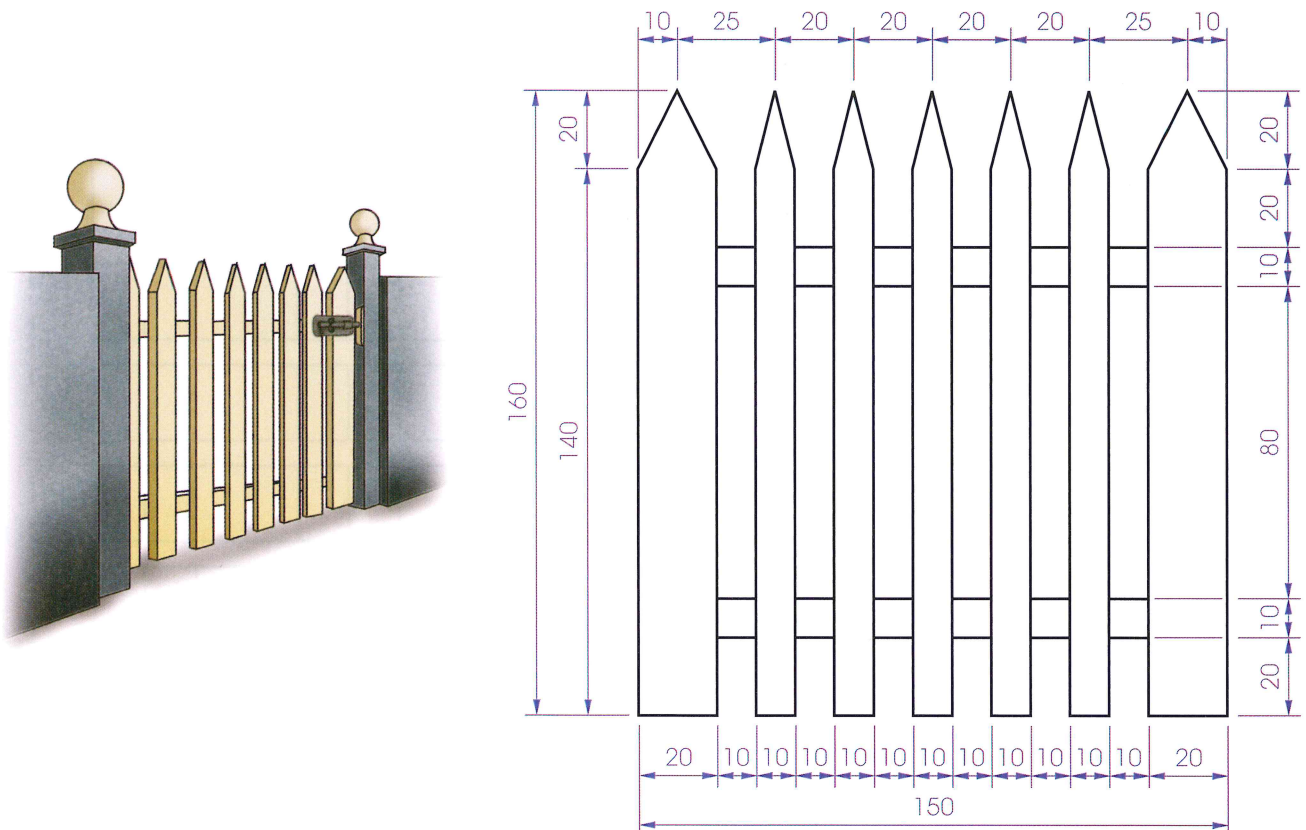


Exercises

1. Draw the view of the **fireplace** shown in the figure below to the given dimensions. Make sure to **balance** the drawing.

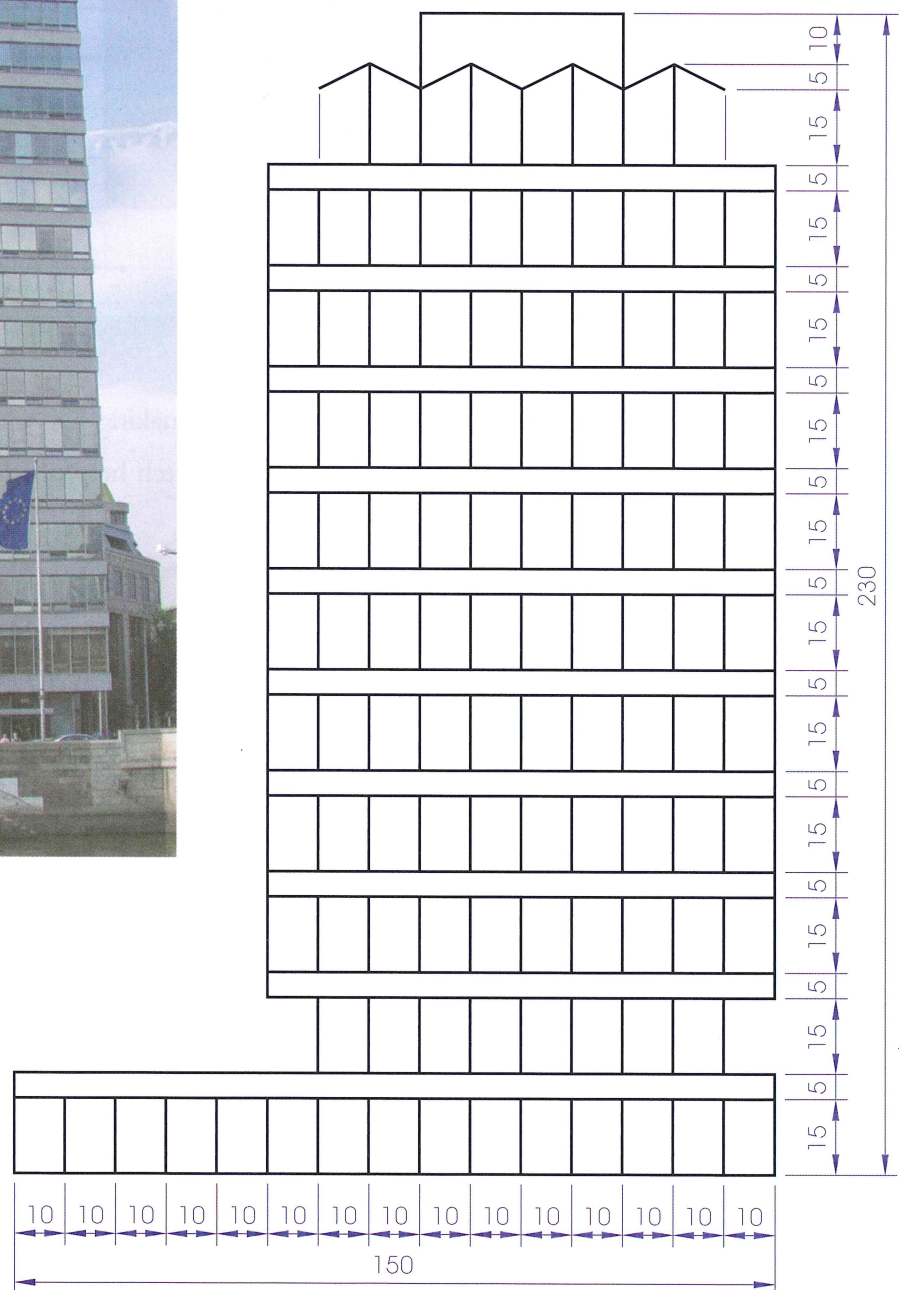


2. (a) Copy the view of the **gate** shown in the figure below, making sure your drawing is **balanced** on the sheet.
(b) Draw a gate of your own design. You will find a sketch helpful to start with.



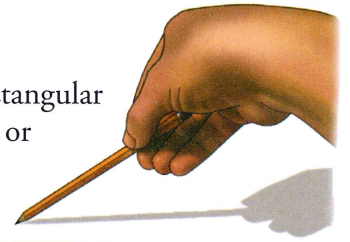
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3. (a) The drawing of the **office block** in the figure below has been made using mainly horizontal and vertical lines. Draw the office block to the given dimensions. Don't forget to balance the drawing on the sheet!
- (b) Design a **multistorey** building of your own, using mainly horizontal and vertical lines.



Construction Lines

These are thin continuous lines that form the basis upon which we build up rectangular drawings. They should be drawn faint, but clear. They can be drawn with a **3H** or **4H pencil**. Use very little pressure on the pencil for construction lines.



Hold the pencil close to its end, tilt it in the direction of travel and trail it by its own weight.

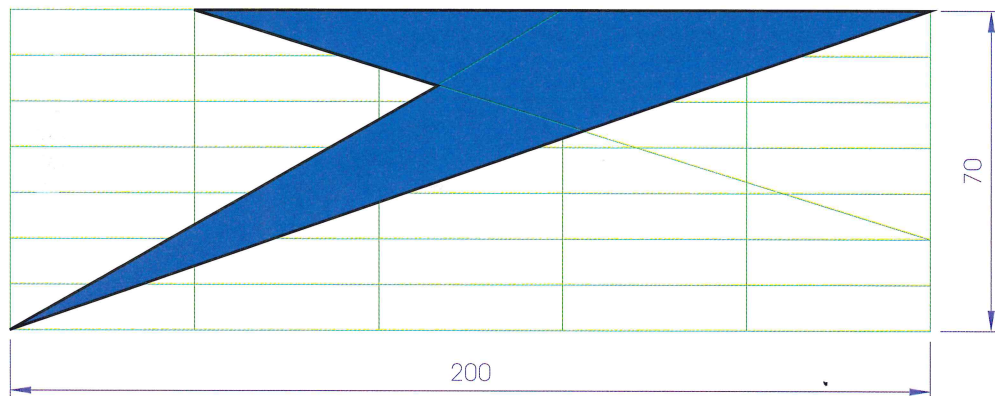
Logograms

A **logogram** or **logo** is a graphical symbol used to stand for a company or its product.

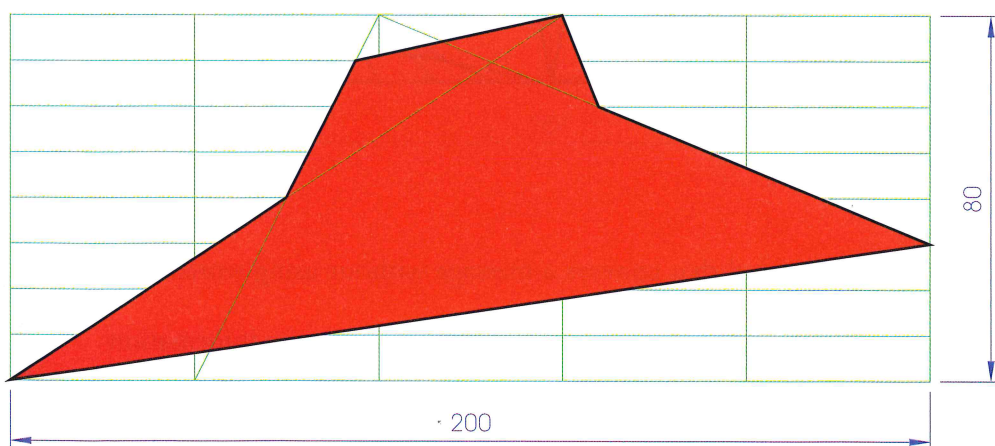
As a form of graphic communication it is a company's trademark or shorthand symbol. The figures below show drawings of the logos for the **Speedo** and **Pizza Hut** companies respectively.

Exercises

1. The logo for the **Speedo** sportswear manufacturer is shown in the figure below. It is drawn on a grid made up of *equally spaced* horizontal and vertical **construction lines**. Draw the logo on a grid as shown.

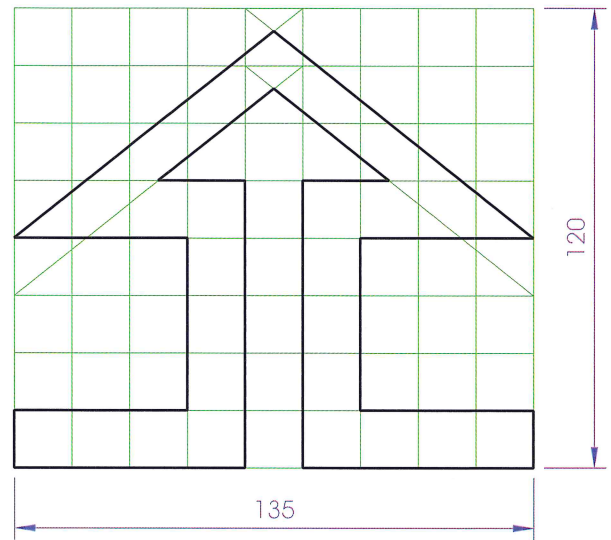


2. The logo for **Pizza Hut** in the figure below is drawn using a grid of equally spaced horizontal and vertical lines. Draw the logo on a grid as shown.



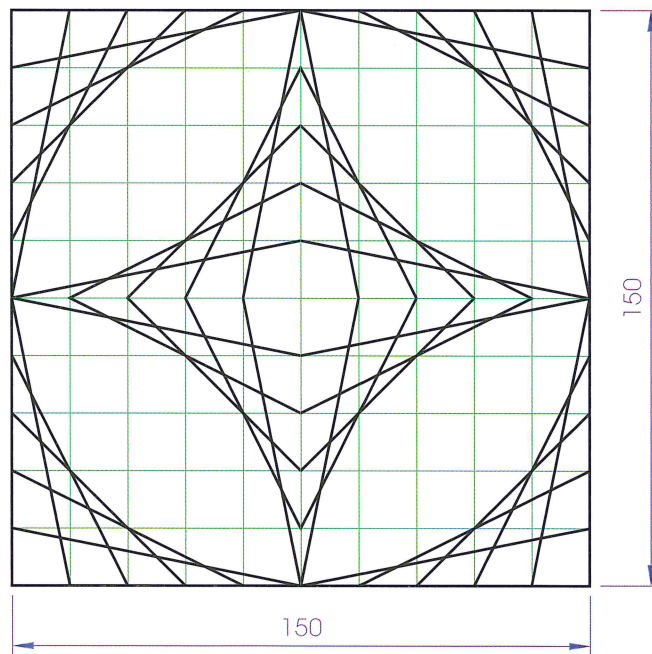
6 Understanding Technical Graphics

3. Draw the **National Housebuilding Guarantee Scheme** logo, using a grid as shown in the figure below. The grid is made up of 15 mm squares.



4. The figure below is a design drawn on a square grid of 15 mm squares. Notice how the straight lines give the impression of a circular curve.

- (a) Draw this design full-size on a square grid as shown.
(b) Using a similar grid, make a drawing of your own design.



Pictograms

A **pictogram** is a picture or symbol that conveys a message without using words.

Pictograms are very useful to the community because, firstly, they convey information quickly, and secondly, they eliminate language difficulties for people in foreign countries. The figure over is a pictogram directing tourists to a caravan and camping site.



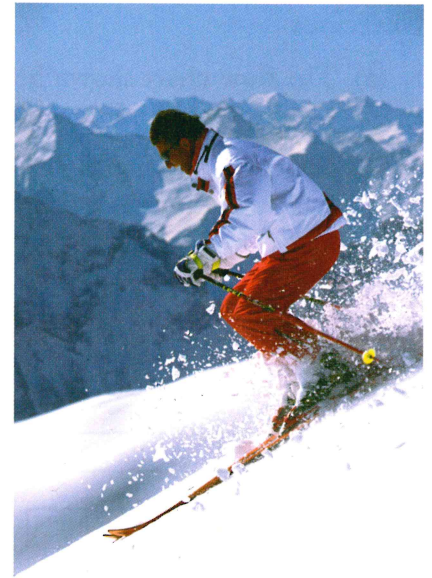
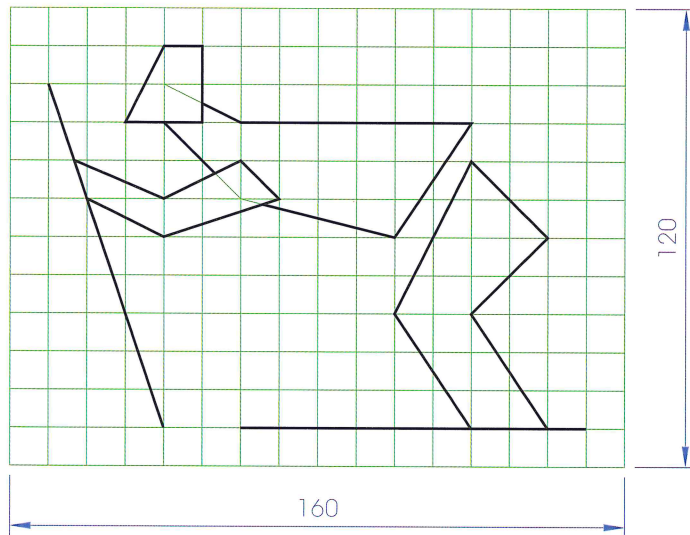
Exercises

1. (a) The figure shown below is a pictogram for a **ski resort**.

Draw the design using a 10 mm square grid as shown to build up your drawing.

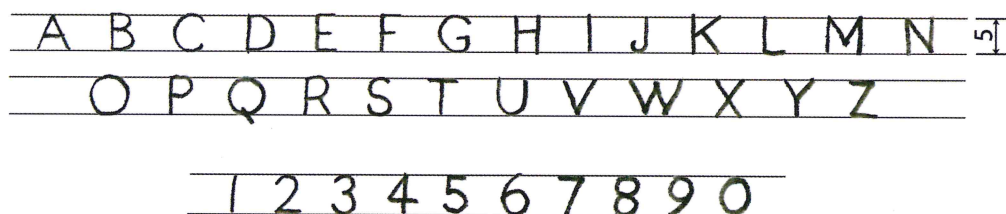
- (b) Use your imagination to design a pictogram for a **running track**.

Draw the design on a square grid similar to the one shown below.



Lettering

Lettering helps to communicate information on drawings. All lettering should be done freehand without the aid of instruments. It must be **neat**, **clear** and **easy to read**. There are many different approaches to lettering, but the one shown below is standard for school use.



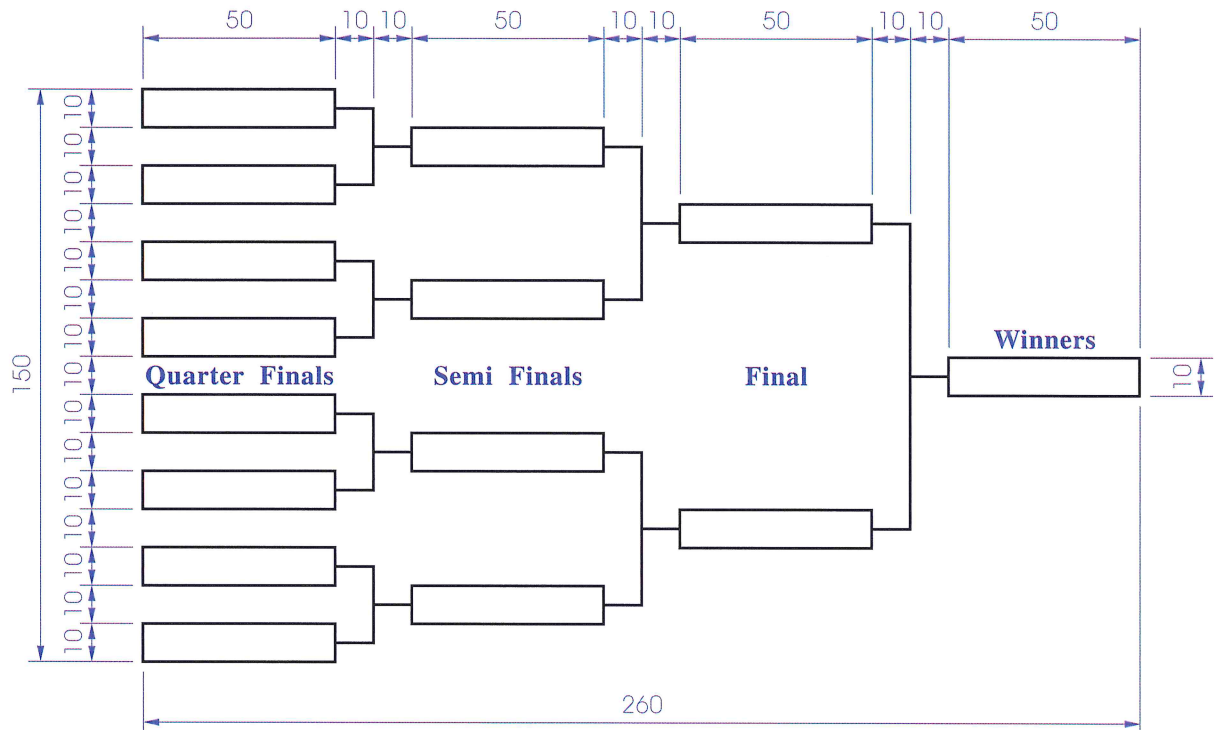
The letters and numbers are formed between light construction lines called **guidelines**, which are drawn 4 or 5 mm apart. **Capital letters** are usually used, but lower-case letters may be used. Note the following:

- The letters **A C D E G H K M O Q R W** fill a square space.
- The letters **O** and **Q** are based on a circle.
- The remainder (except **I**) fill about two-thirds of a square.
- Space between words should be equal to the width of one letter, and the distance between letters and numbers must be uniform. Keep the letters in each word close together.

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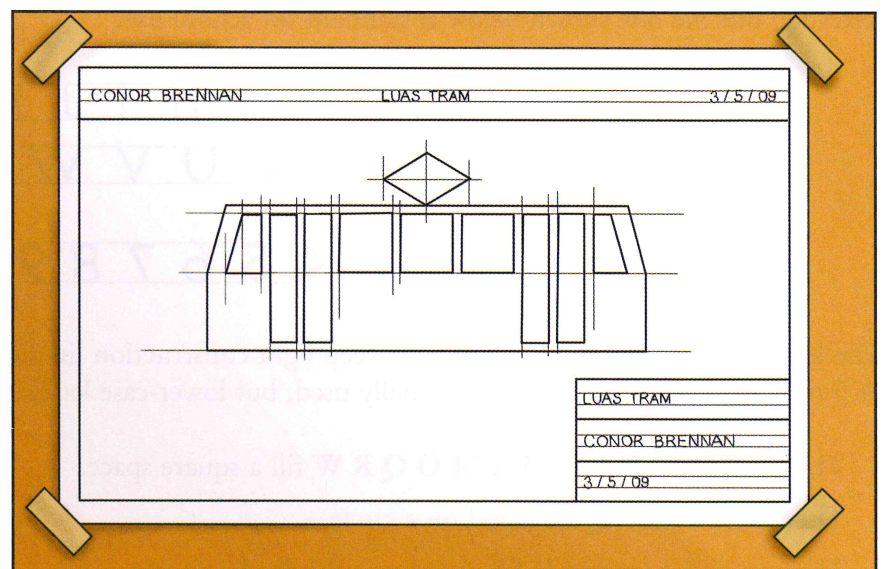
Exercises

1. (a) The **flow chart** shown below is for the knockout stages of the **All-Ireland Football Championship**. Draw the chart as shown.
- (b) Practise your lettering by entering the teams you predict will make it through from the Quarter Final stage to the Final of this years' All-Ireland Football Championship.



Title Block

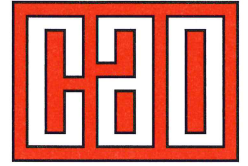
Every drawing needs a **title block** to show the title of the drawing, your name and the date. There are many different styles. Two possibilities for title blocks are shown in the figure over.



Lettering in the title block space is done between the guidelines. The **title** of the drawing, the **name** of the student and the **date** are usually included.

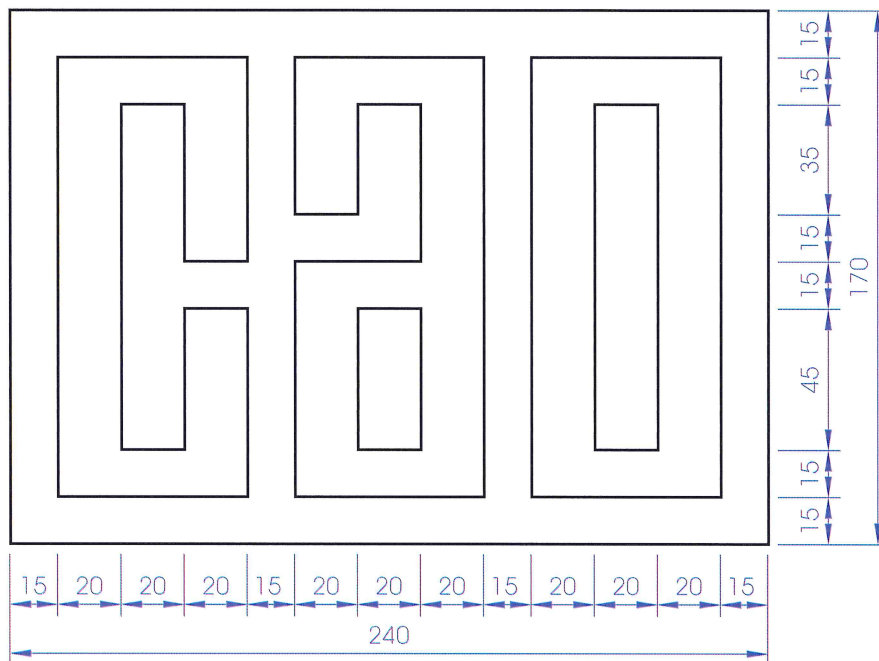
Monograms

A **monogram** is a logo that uses only text to convey a message.

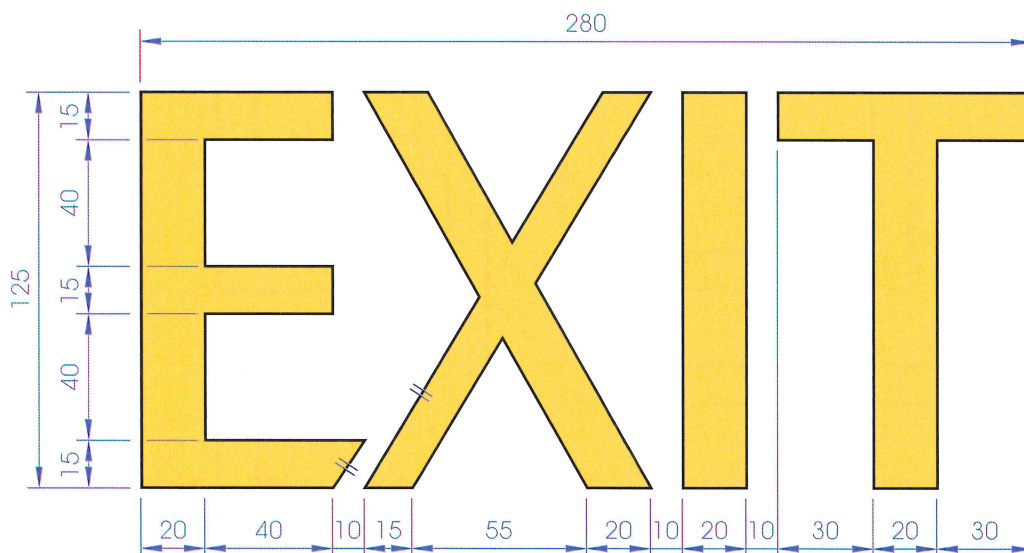


Exercises

1. Shown in the figure below is a drawing of the **CAO** monogram. Reproduce the drawing full-size on an A3 sheet. Use **construction lines** to build up your drawing and don't forget to include a **title block**!

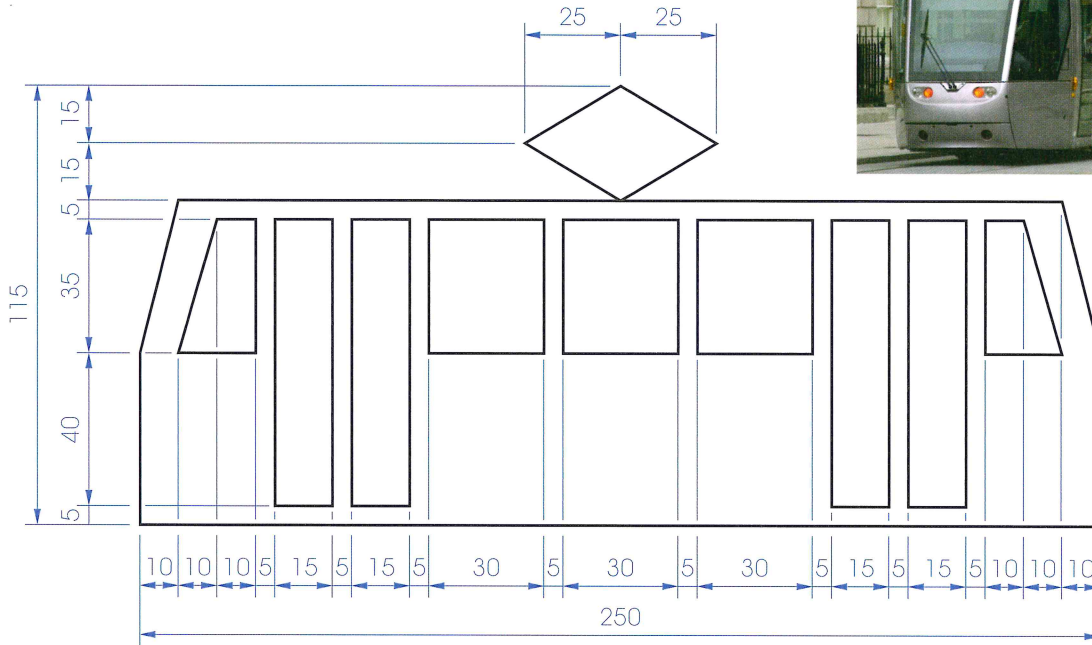


2. A drawing of an **EXIT** sign is shown in the figure below.
Draw the sign to the sizes given on an A3 sheet, using **construction lines** to build up your drawing.



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3. Draw the given view of a **Luas** tram shown in the figure below using **construction lines** to build up your drawing. Insert a **title block** on the sheet.



4. The drawing in the figure below shows a **maze** made up of a series of horizontal and vertical lines. The walls are 10 mm thick and the pathways are 20 mm wide.

Reproduce the drawing full-size on an A3 sheet. Using **construction lines** to build up your drawing will make the work easier to do!

