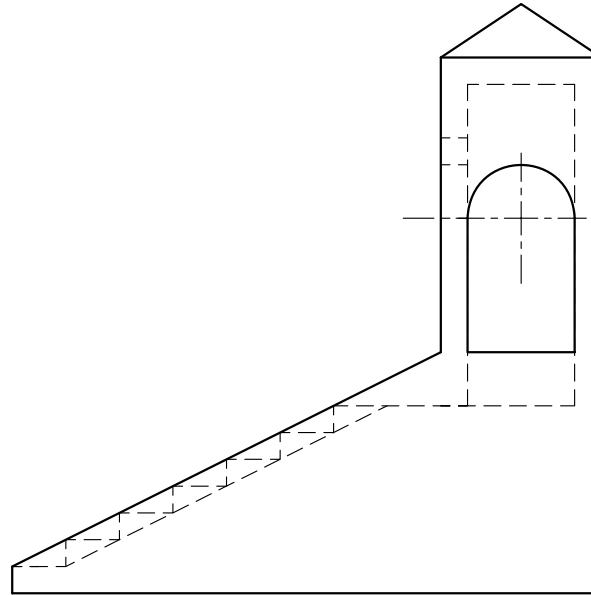
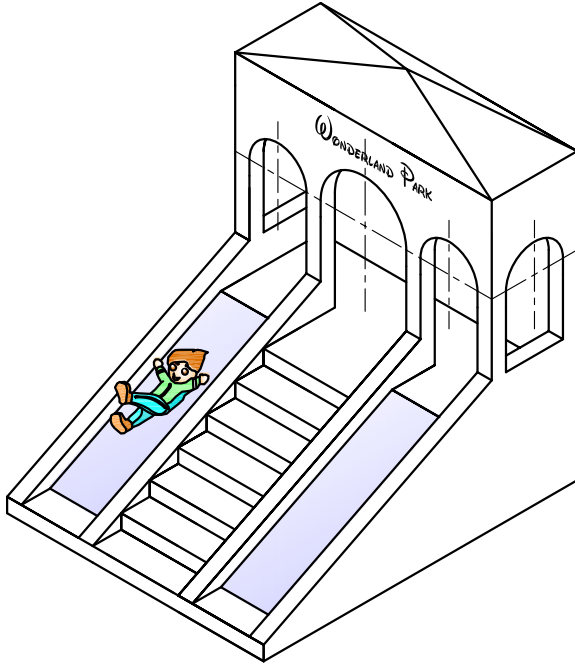


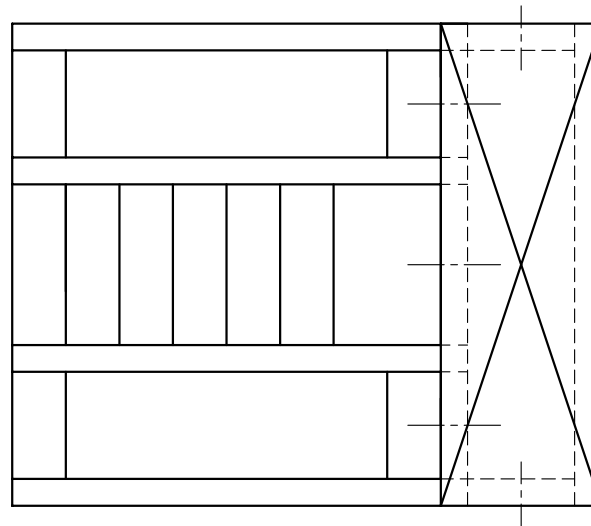
Question 1. An Isometric View a Front Elevation and a Plan of a Playground Slide are given. In the space indicated:

- a) project the End Elevation
- b) draw the symbol of the projection used

18 marks



FRONT ELEVATION



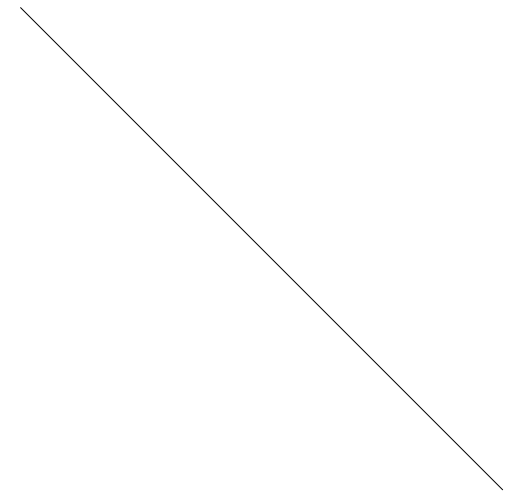
PLAN

WONDERLAND PARK

END ELEVATION



PROJECTION SYMBOL



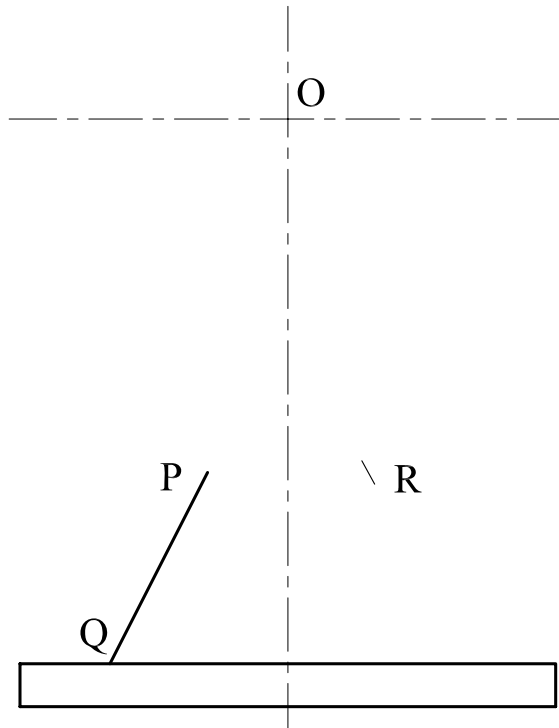
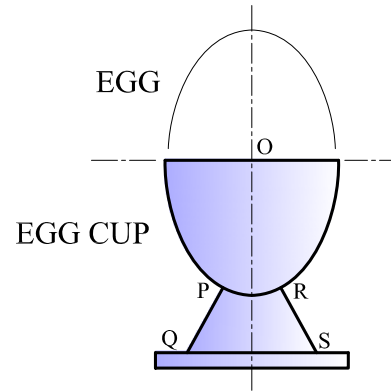
Question 2. The egg cup shown consists of a semi-ellipse mounted on a base. Lines PQ and RS are two normals at points P and R respectively on the semi-ellipse.

a. Using a major axis of 140mm and a minor axis of 90mm, construct the semi-ellipse on the given start lines.

b. Construct a normal to the ellipse at point R to complete the drawing.

Note: Do not draw the egg.

14 marks

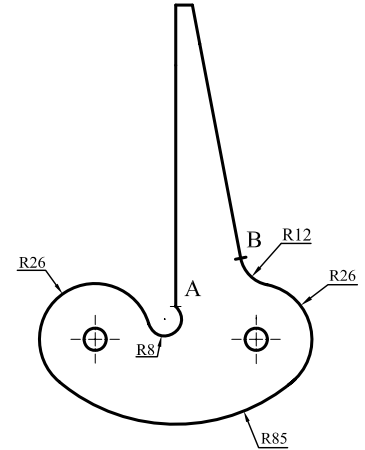
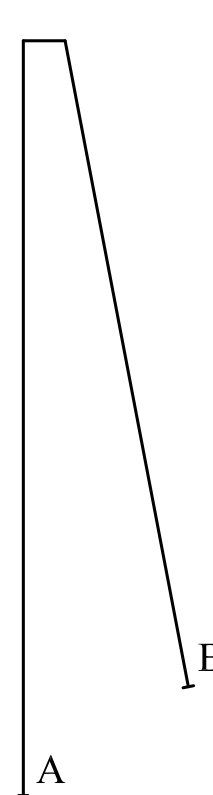


Question 3. The tool shown, called a centre-square, is used to find the centre of round bars.

Using the given start lines and centres, draw the centre-square showing clearly the constructions required to locate the centre of the arcs and the points of tangencies.

Note: B is a point of tangency.

14 marks



Question 4. Two orthographic views of a wooden kennel are given.

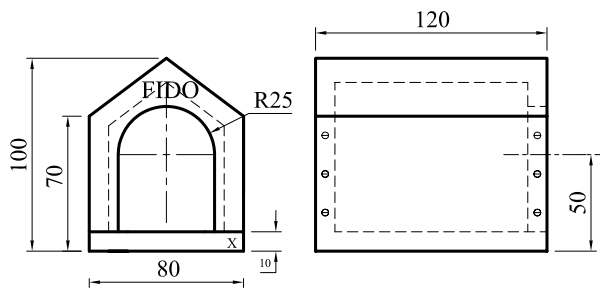
On the given start lines and using the given dimensions, draw an isometric view of the kennel.

Notes:

Place corner X in the lowermost position.

Material thickness is 10mm throughout.

14 marks



FIDO

∅

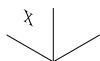
∅

∅

∅

∅

∅



Question 5. Health and safety signs can be separated into four categories namely prohibition, hazards, mandatory and safe condition. Colours and shapes distinguish between the different categories.

Three different types of safety signs are given below.

In the space provided:

- mark the right category and underline the correct message.
- colour the signs according to the regulations set on ISO 7010.

14 marks

Mark the right category and colour the sign

- Prohibition
- Mandatory
- Hazard Warning
- Safe Condition

Underline the correct message.

- Danger of falling.
- Abseiling activity



Mark the right category and colour the sign

- Prohibition
- Mandatory
- Hazard Warning
- Safe Condition

Underline the correct message.

- Wash your hands
- Entry is prohibited

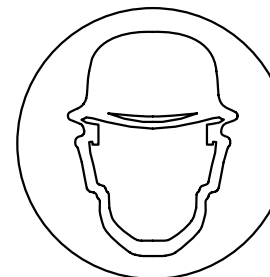


Mark the right category and colour the sign

- Prohibition
- Mandatory
- Hazard Warning
- Safe Condition

Underline the correct message.

- Wear head protection
- Only white helmets are allowed

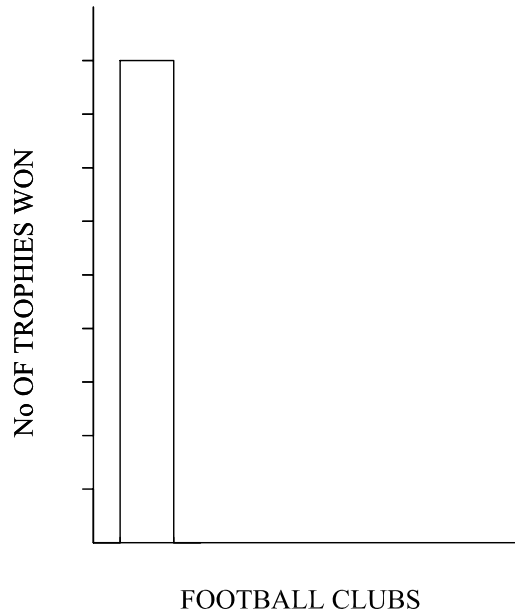


Sheet 3 of 4

Question 6. The table shows the years in which five Italian football teams won the annual cup competition known as *Coppa Italia*. Complete the vertical **bar graph** to show the number of times that each club won the *Coppa Italia* trophy. The first bar (that of Juventus) is already drawn. Add colour and notation making use of the key.

12 marks

JUVENTUS	1938	1942	1959	1960	1965	1979	1983	1990	1995
ROMA	1964	1969	1980	1981	1984	1986	1991	2007	2008
INTER	1939	1978	1982	2005	2006	2010			
FIorentina	1940	1961	1966	1975	1996	2001			
MILAN	1967	1972	1973	1977	2003				



KEY	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Question 7. A thin sheet metal candle extinguisher is shown on the right. The upper part of the extinguisher consists of a right cone cut at the base. Using the given front elevation and the incomplete plan, construct the development of the given cone, starting from the given apex O.

- Note: a) place the seam on OP
 b) do not complete the plan
 c) some construction lines are already drawn.

14 marks

