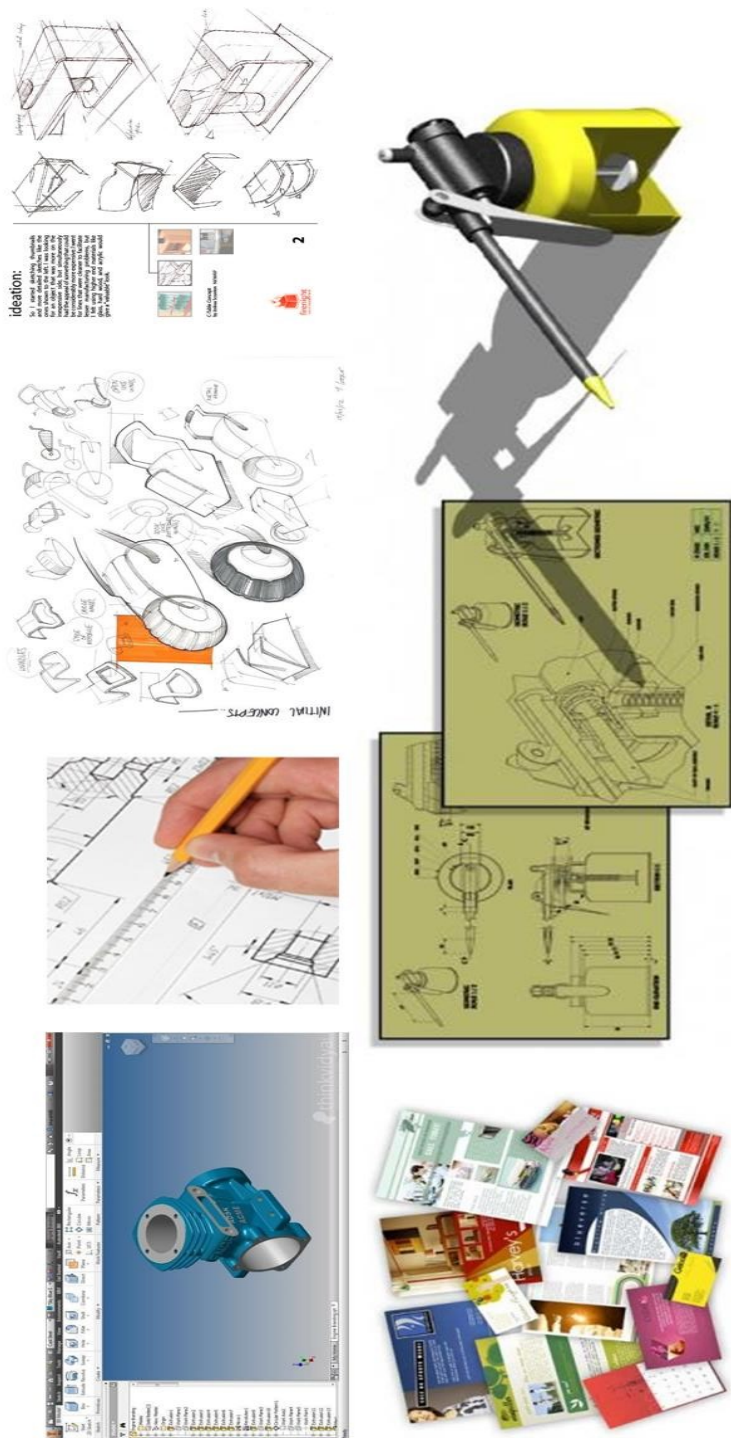


# BGE

## GRAPHIC COMMUNICATION



This booklet belongs to:

.....

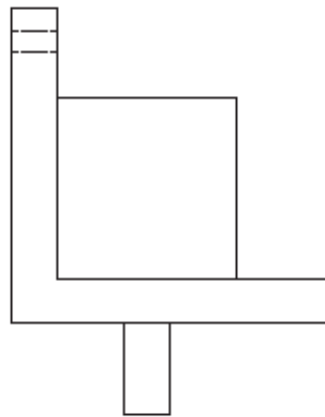
Class:..... Teacher:.....

The end elevation and plan of a cupboard lock are given. A pictorial view is also shown.

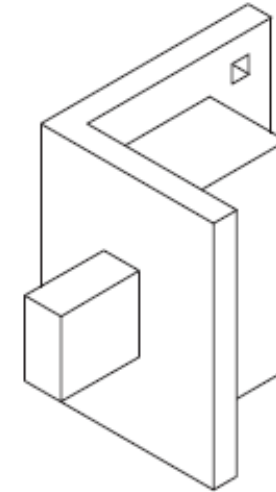
Draw the elevation projected from the plan and end elevation. 8 marks

Add the overall height and breadth using BSi conventions. 2 marks.

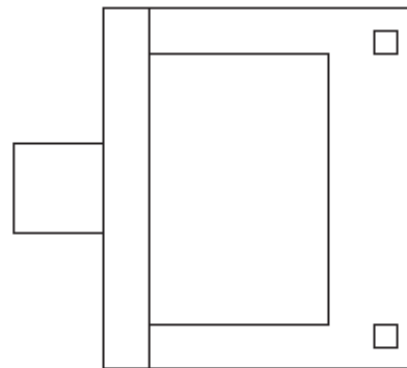
Show all hidden detail.



PLAN

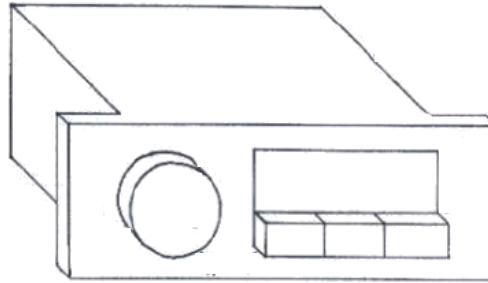


PICTORIAL VIEW  
(NOT TO SCALE)



END ELEVATION

ELEVATION

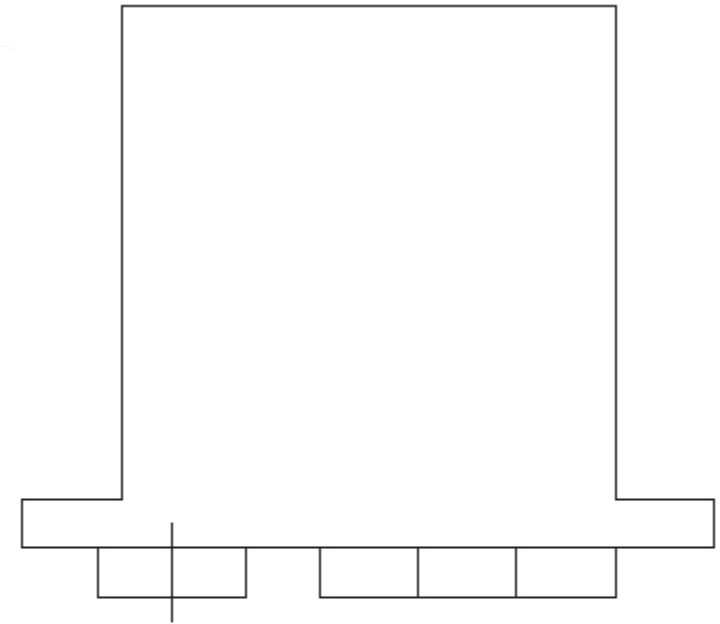


The end elevation and plan of a car radio are given. A pictorial view is also shown.

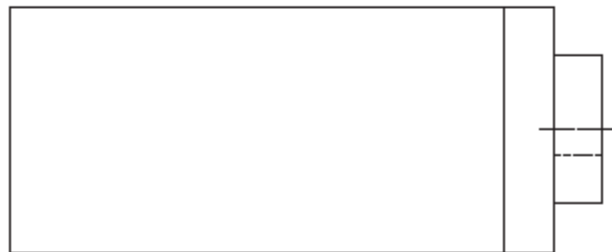
Draw the elevation projected from the plan and end elevation. 8 marks

Add the overall height and breadth using BSi conventions. 2 marks.

**Show all hidden detail.**



PLAN



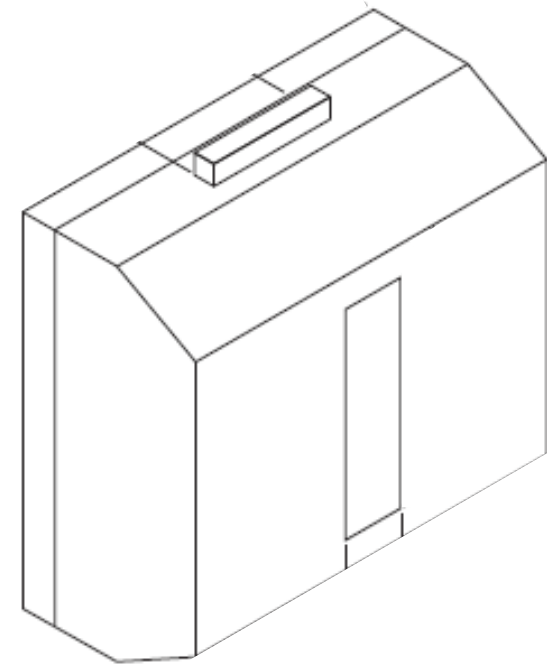
END ELEVATION

ELEVATION

A pictorial view of a paper towel dispenser is shown. The end elevation is also given.

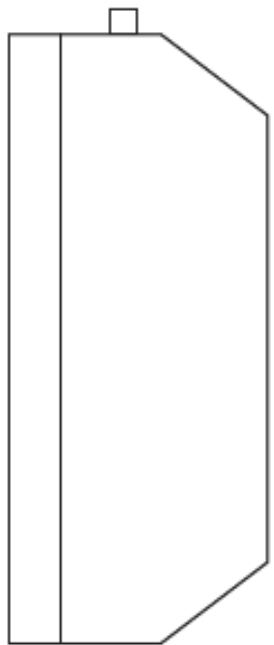
Sketch the elevation projected from the end elevation. 8 marks

Sketch the plan. 4 marks



NOT TO SCALE

PLAN



END ELEVATION



ELEVATION

The elevation and end elevation of a timer are shown to a scale of 1:1.

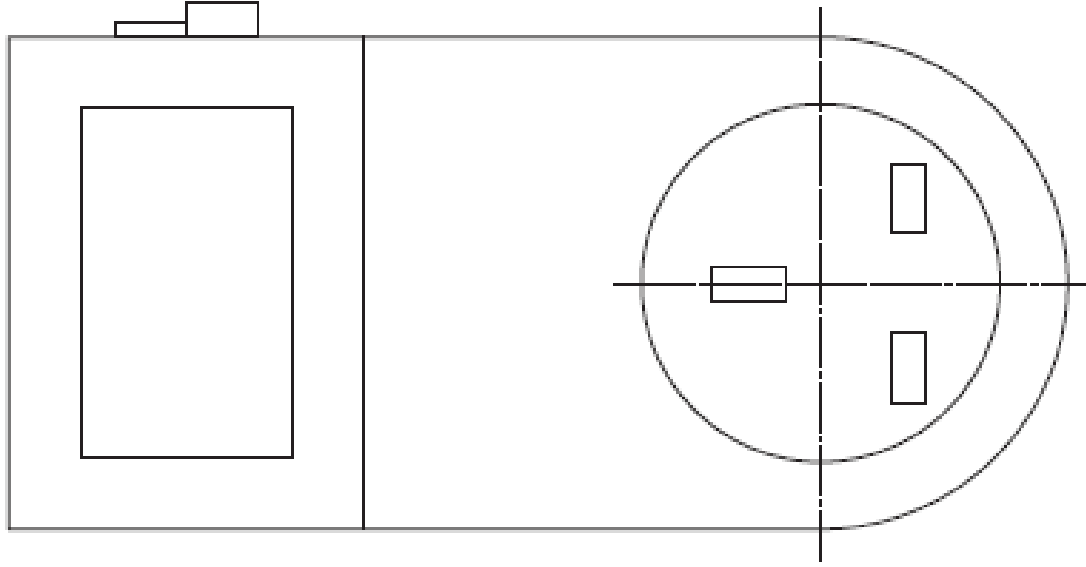
Use a ruler to measure the drawing and dimension it to BS conventions. Include:

Linear dimensions

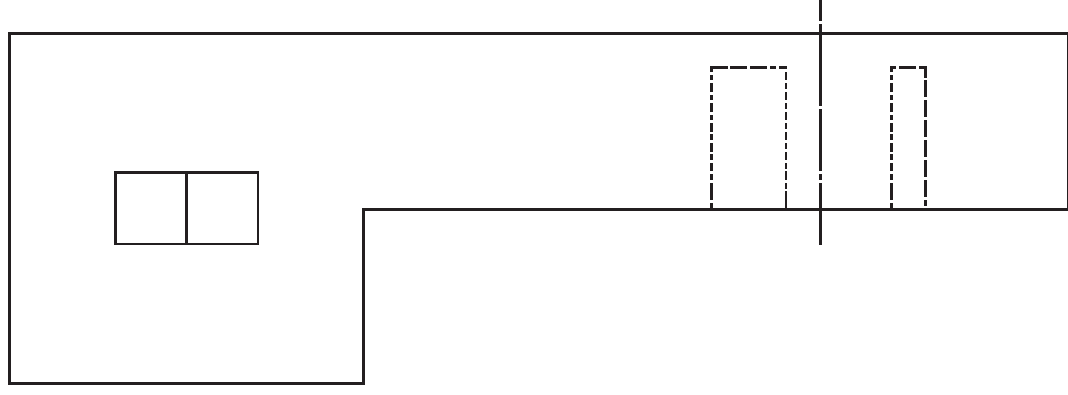
Diameter

Radius

Use of datum lines



**ELEVATION**



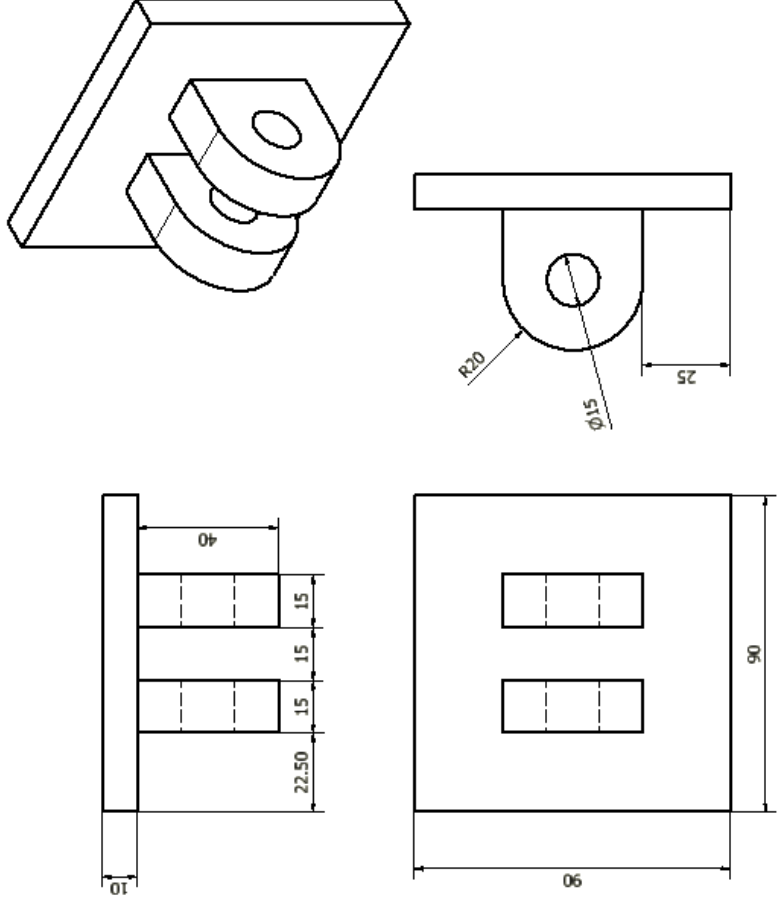
**END ELEVATION**

10 marks

Name:

Date:

Teacher:



The Bracket shown was designed using 3D modelling software. An isometric view and 3 orthographic views are shown.

Describe, with reference to correct dimensions and 3D CAD modelling terms, how you would create the bracket, use sketches to support your answer. ( It will take at least 4 steps). ( 8 marks )

An orthographic and a pictorial drawing showing different line types are given.

Dimension
Hidden
Hatching
Cutting plane
Outline

Table of line types

- (a) Complete the table by adding the names of the line types shown at 1, 2, 3, 4 and 5. The five line types are given in the table above.

Number	Line Type
1	
2	
3	
4	
5	

KI 5

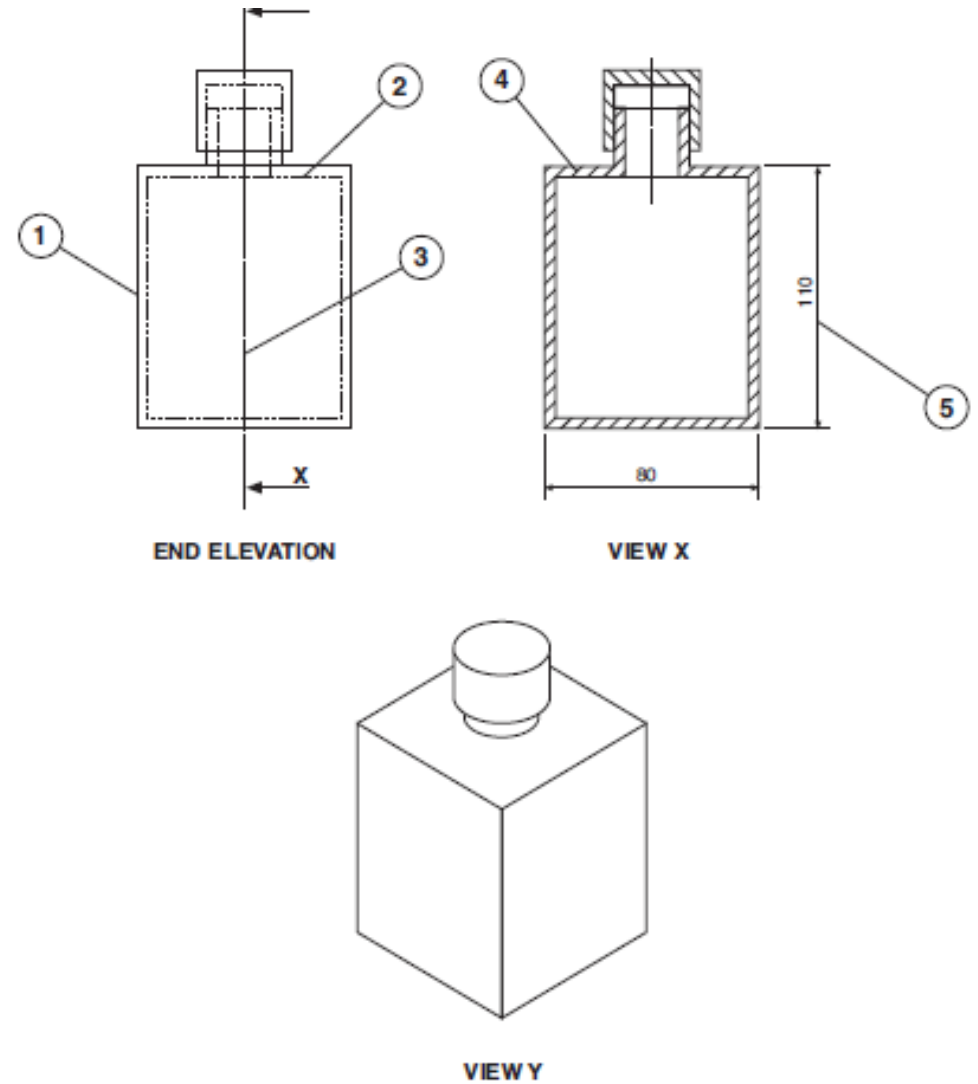
- (b) State the type of pictorial view shown in **View Y**.

**View Y** ..... KI 1

- (c) State the name of **one** other type of pictorial drawing.

Answer ..... KI 1

**Total (KI 7)**



Study the drawings shown opposite and answer the following questions.

(a) State the names given to the types of views shown at **View P**, **View Q**, **View R** and **View S**.

**View P** ..... **View Q** .....  
**View R** ..... **View S** ..... **KI 4**

(b) Explain why the type of view shown in **View P** was a good choice for the view.

**Answer** .....  
 ..... **KI 1**

(c) State the angle used at **M** on **View P**.

**Angle M** ..... **KI 1**

(d) State the full name given to points 1 and 2 on **View R**.

**Answer** ..... **KI 1**

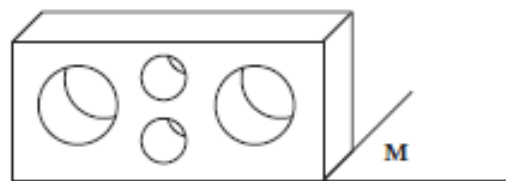
(e) State the name given to line **L** on **View R**.

**Line L** ..... **KI 1**

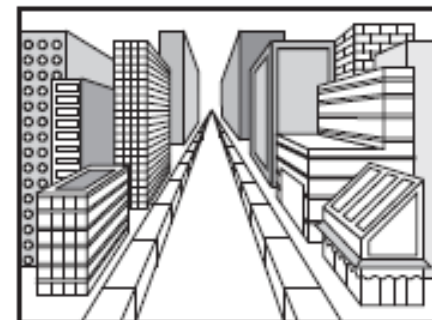
(f) State the angle used at **N** on **View S**.

**Angle N** ..... **KI 1**

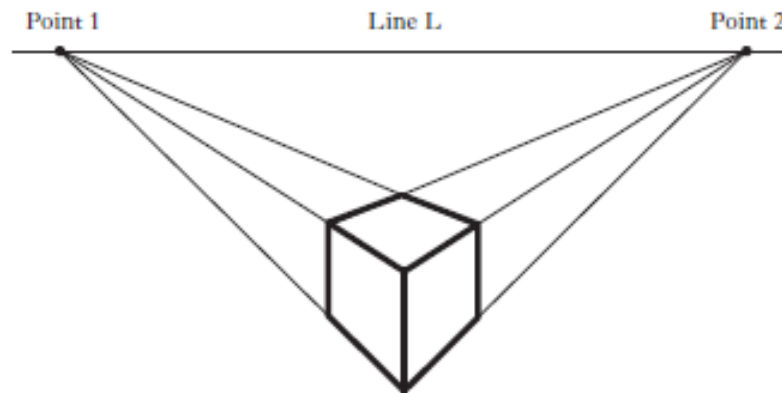
**Total (KI 9)**



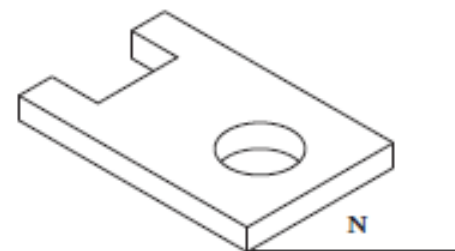
**View P**



**View Q**



**View R**



**View S**



Three views of a junction box are shown.

(a) State the name given to these types of view.

Name ..... KI 1

(b) State the name of the line types **P**, **Q**, **R**, **S** and **T**.

**P** .....

**Q** .....

**R** .....

**S** .....

**T** ..... KI 5

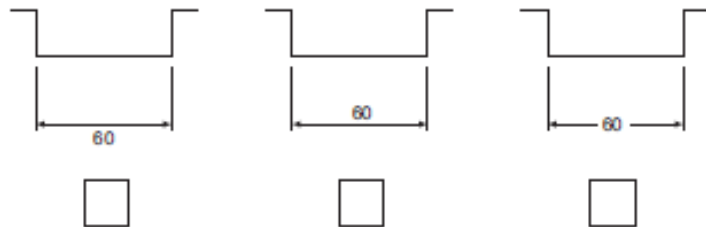
(c) State the name given to **View A**.

**View A** ..... KI 1

(d) State the angle used for the lines at **T**.

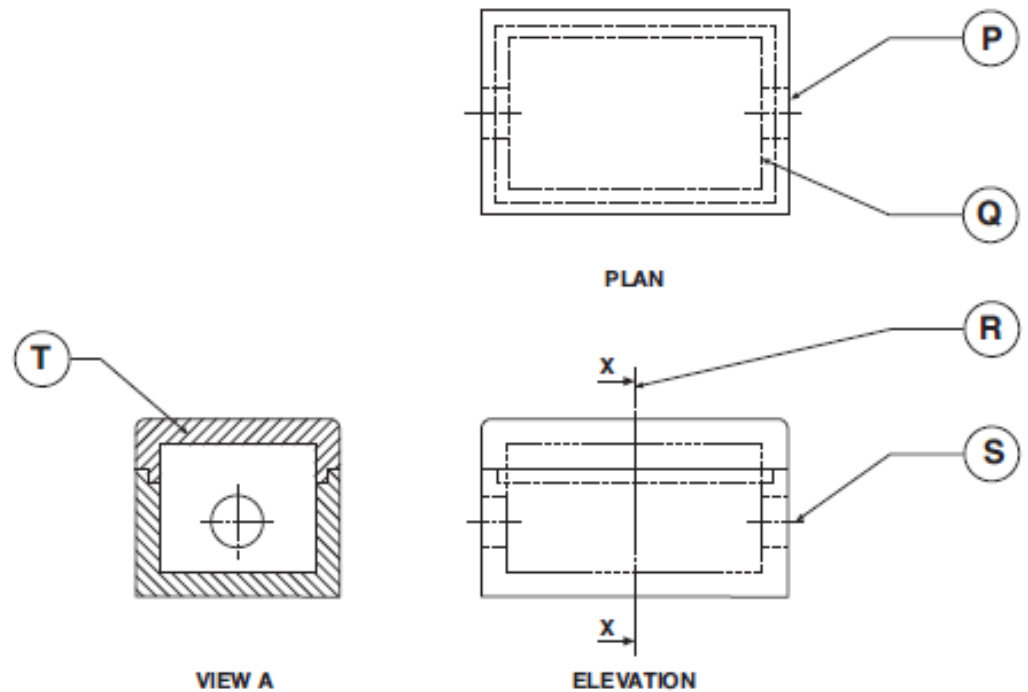
Angle ..... KI 1

(e) Look at the dimensions below and place a tick (✓) in the box that shows the dimension correct to British Standards.



KI 1

Total (KI 9)



Three views of a guide support are given opposite.

(a) State the name given to these types of drawing.

Name ..... KI 1

(b) State the name of the line types in P Q R & S.

P .....

Q .....

R .....

S ..... KI 4

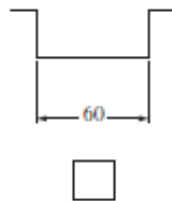
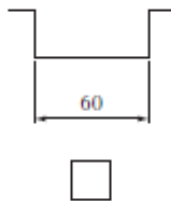
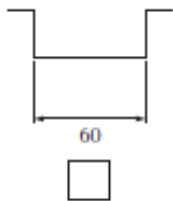
(c) State the name given to VIEW Y.

VIEW Y ..... KI 1

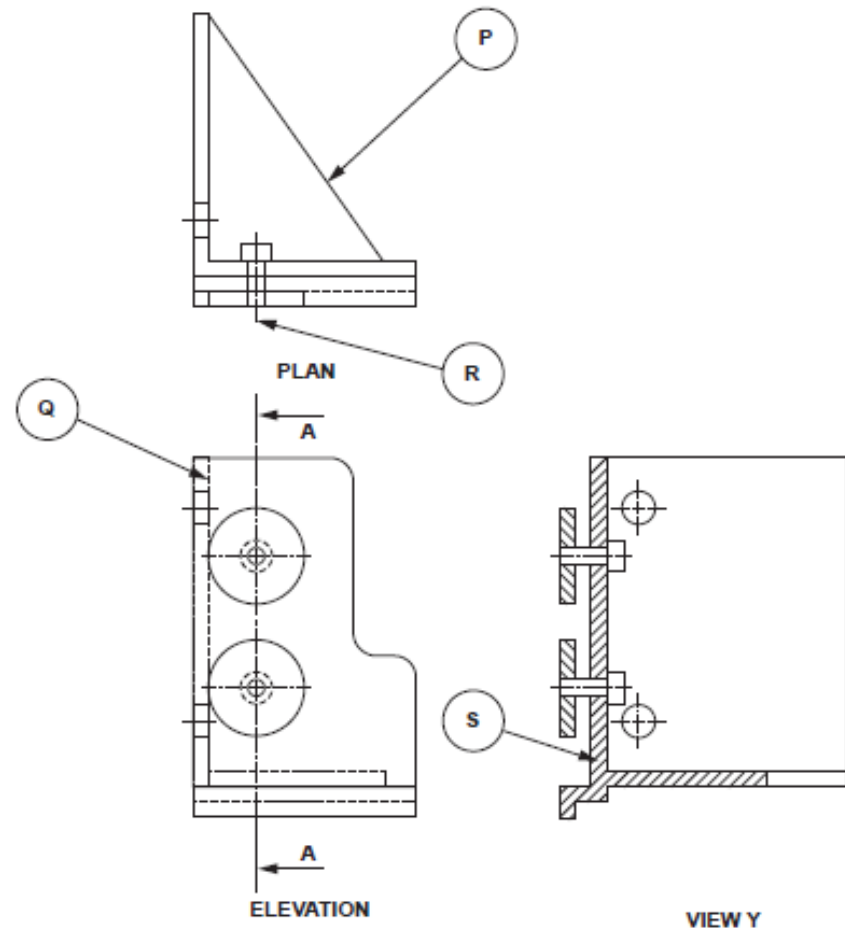
(d) State the angles used for the lines at S.

Angle ..... KI 1

(e) Look at the dimensions below and place a tick (✓) in the box that shows the dimensions correct to British Standards.



KI 1  
Total (KI 8)



A number of different pictorial drawings are given opposite.

(a) State the names given to the types of pictorial shown at **P, Q, R** and **S**.

**View P** ..... **View Q** .....

**View R** ..... **View S** .....

**K1 4**

(b) State the name given to line **L** on **View P**.

Answer .....

**K1 1**

(c) State the angles used at **M** and **N** on **View Q**.

Angle **M** ..... Angle **N** .....

**K1 2**

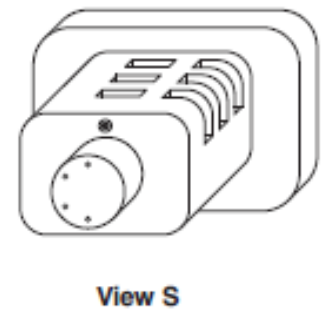
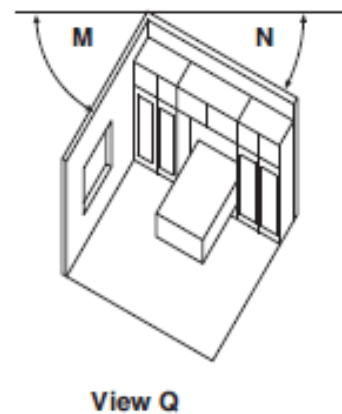
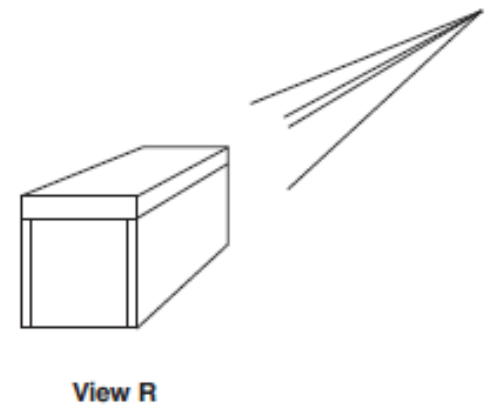
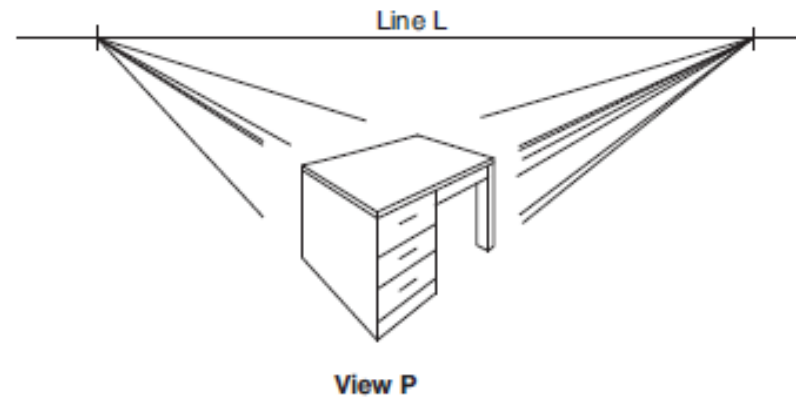
(d) State **one** advantage of using **View S** when drawing pictorials.

Advantage .....

.....

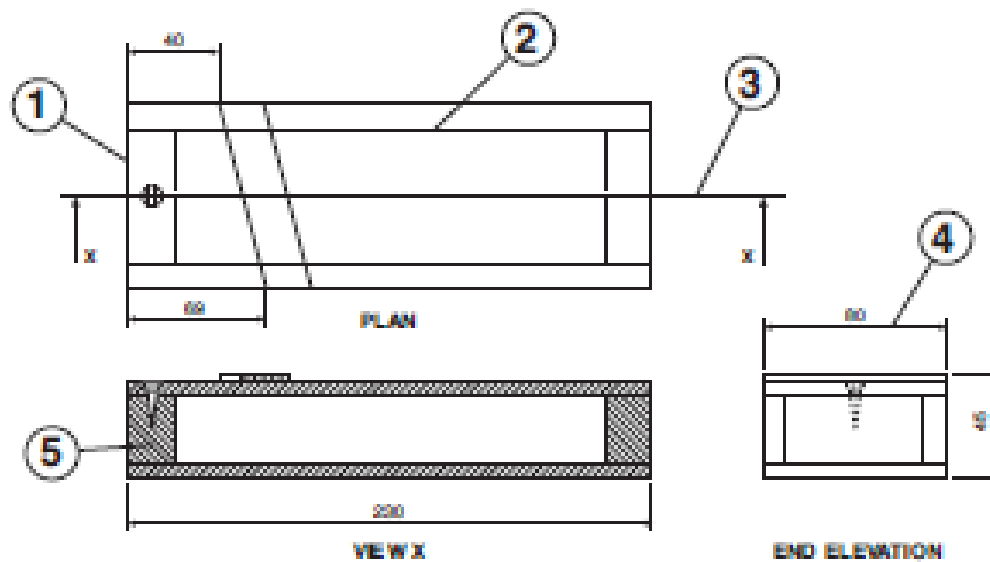
**K1 1**

**Total (K1 8)**



3

An orthographic drawing, with a number of different line types indicated, is given below. A pictorial view is also given.



(a) Complete the given table by adding the number of the line types indicated on the orthographic drawing above.

Table of line types

Dimension	
Hidden	
Hatching	
Cutting plane	
Outline	

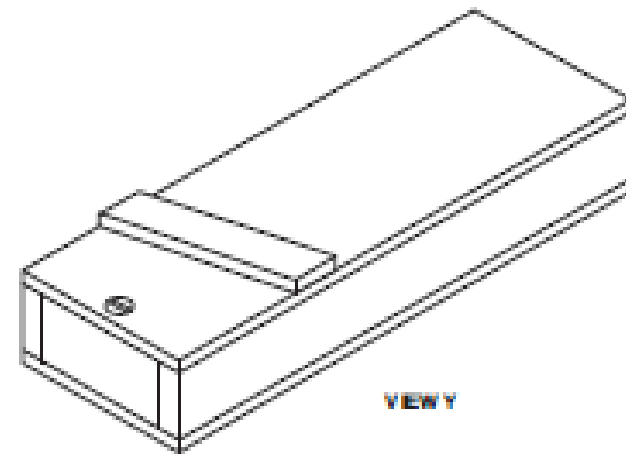
RI 5

(b) State the name of view X.

View X .....

RI 1

3



(c) State the type of pictorial drawing shown in view Y.

View Y .....

RI 1

(d) State the name of two other types of pictorial drawing.

Answer 1 ..... Answer 2 .....

RI 2

Total (RI 9)

Architects use BSI symbols to represent features on their drawings.

(a) State what each of the architectural symbols shown at **A**, **B**, **C**, **D**, **E**, **F** and **G** represent.

**A** ..... **B** .....

**C** ..... **D** .....

**E** ..... **F** .....

**G** .....

**KI 7**



**A**



**B**



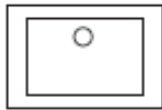
**C**



**D**



**E**



**F**



**G**

Study the drawings opposite and answer the following questions.

(a) Identify the symbols **A**, **B**, **C** and **D** on **Drawing X**.

**A** .....

**B** .....

**C** .....

**D** .....

**KI 4**

(b) Shown below is a plan used by architects.

State the name given to this type of plan.

Name .....

**KI 1**

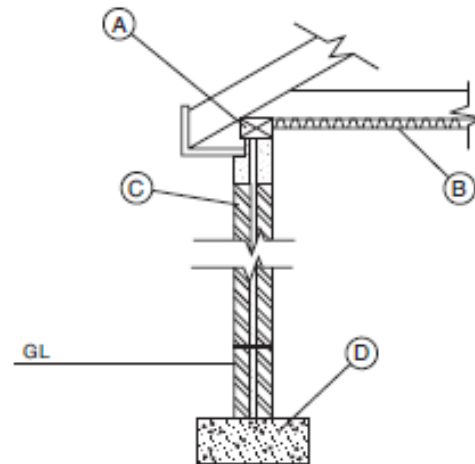


(c) State the names given to two other types of plan commonly used by architects

**Plan 1** ..... **Plan 2** .....

**KI 2**

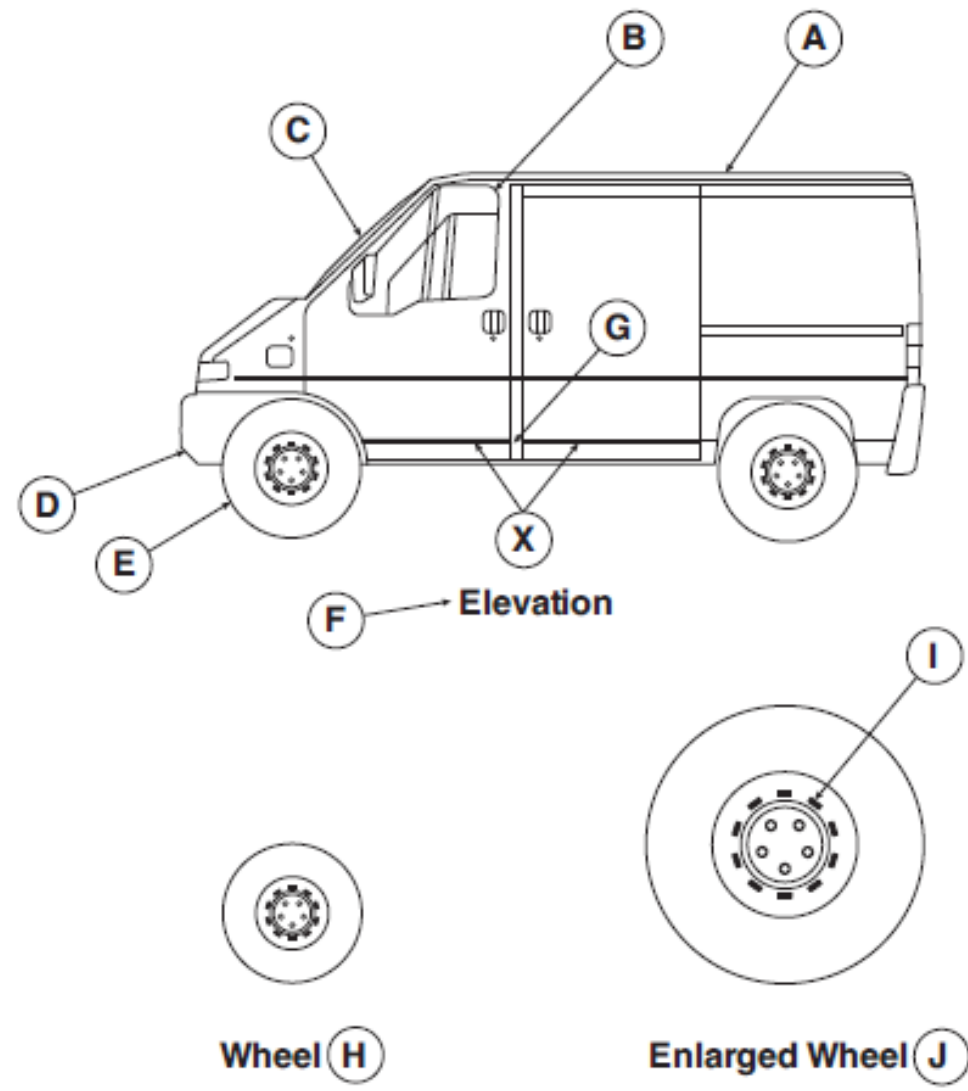
Total (K) 14



**DRAWING X**

Drawings of a van are shown opposite. State the single CAD command that would be used to create the following details.

- (a) The straight edge shown at **A**.  
Command .....
- (b) The rounded corner shown at **B**.  
Command .....
- (c) The curved surface shown at **C**.  
Command .....
- (d) The angled corner shown at **D**.  
Command .....
- (e) The circumference of the wheel shown at **E**.  
Command .....
- (f) The name of the view shown at **F**.  
Command .....
- (g) The gap in the line **X** shown at **G**.  
Command .....
- (h) The identical wheel shown at **H**.  
Command .....
- (i) The identical features around the wheel shown at **I**.  
Command .....
- (j) The enlarged view of the wheel shown at **J**.  
Command .....



Total (KI 10)

1 Three types of plans used in the building industry are shown.  
Study these plans and answer the following questions.

(a) (i) State the name given to **Plan A**.

**Plan A** .....

(ii) Identify the symbols **B, C, D, E, F** and **G** used on this plan.

**B** ..... **C** .....

**D** ..... **E** .....

**F** ..... **G** .....

(b) (i) State the name given to **Plan B**.

**Plan B** .....

(ii) State which of the following scales was used for this plan.

1:10    1:100    1:200    1:1250

Scale .....

(iii) Identify the symbol **X** shown on **Plan B**.

Symbol **X** .....

(c) State the name given to **Plan C**.

**Plan C** .....

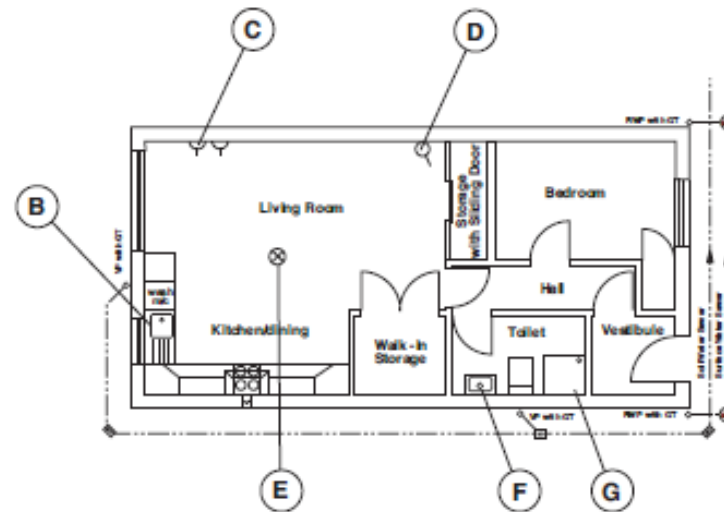
KI 1

KI 6

KI 3

KI 1

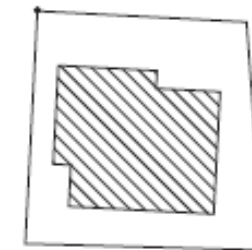
Total (KI 11)



PLAN A



PLAN B



PLAN C

SCALE 1:250

2

A pictorial view and plans of a house are shown opposite.

2

- (a) (i) State the type of pictorial view shown at **A**.

**Pictorial View A** .....

- (ii) State **one** reason the architect used this type of view.

Reason .....

..... **KI 2**

- (b) State the types of plan shown at **B**, **C** and **D**.

**Plan B** .....

**Plan C** .....

**Plan D** ..... **KI 3**

- (c) From the list of scales given below, state an appropriate scale for **Plan B**.

1: 100

1: 500

1: 1250

1: 2500

Scale ..... **KI 1**

- (d) State what the **symbol X** on **Plan C** represents.

**Symbol X** ..... **KI 1**

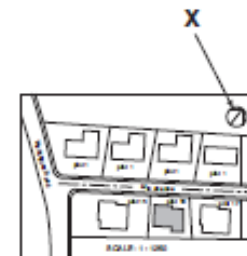
Total (KI 7)



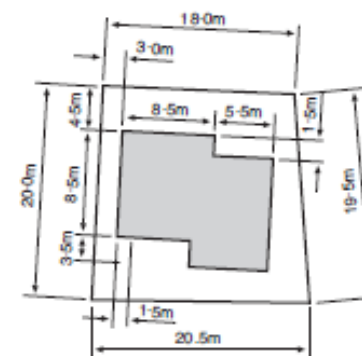
**VIEW A**



**PLAN B**



**PLAN C**



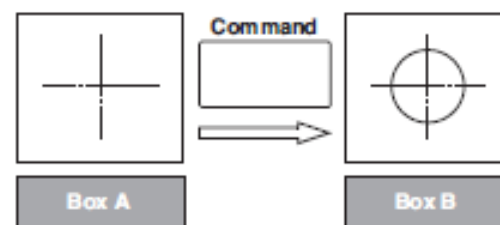
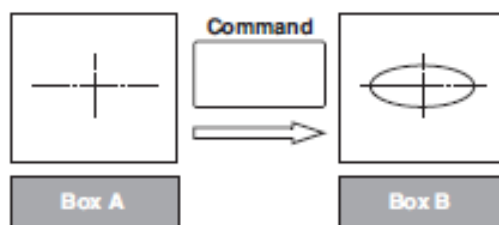
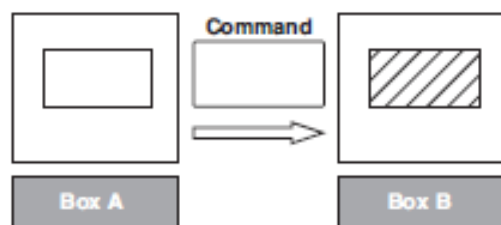
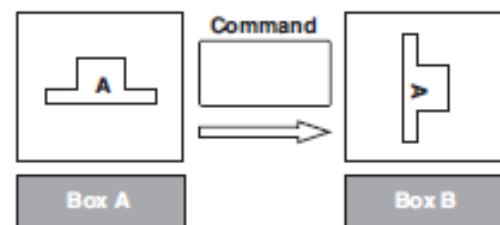
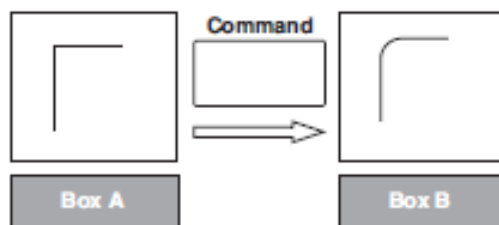
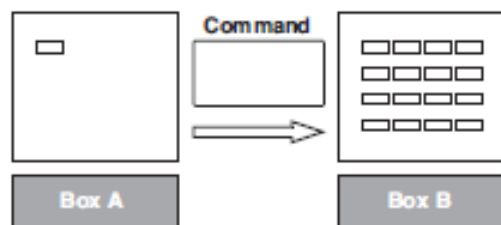
**PLAN D**



3

The use of CAD systems is now well established in many different industries that use graphics.

(a) Look at the features shown in **Box A** and, in the box provided, state the single CAD command that could be used to change the feature to what is shown in **Box B**.



KI 6

(b) State the names of **two** devices that could be used to obtain hard copies of drawings produced using a CAD system.

Device .....

Device .....

KI 2

(c) (i) Explain what is meant by the term "to back-up" when applied to work done using CAD.

Explanation .....

.....

(ii) State why it is good practice to make a back-up.

Reason .....

.....

KI 2

Total (KI 10)

4

Study the building drawings opposite.

(a) Identify the symbols **A, B, C, D** and **E** on the Floor Plan of the Kitchen.

**A**.....

**B**.....

**C**.....

**D**.....

**E**.....

**KI 5**

(b) Identify the symbols **F, G** and **H** on the Floor Plan of the Bathroom.

**F**.....

**G**.....

**H**.....

**KI 3**

**Total (KI 8)**

