



***Junior Certificate Examination, 2018***

***Technical Graphics***  
***Ordinary Level***  
***Section A***  
*(120 marks)*

***Monday, 18 June***  
***Morning 9:30 - 12:00***

Centre Number

***Instructions***

- (a) Answer **any ten** questions in the spaces provided.  
 All questions carry equal marks.
- (b) Construction lines must be clearly shown.
- (c) All measurements are in millimetres.
- (d) This booklet must be handed up at the end of the examination.
- (e) Write your examination number in the box provided below  
 and on all other pages used.

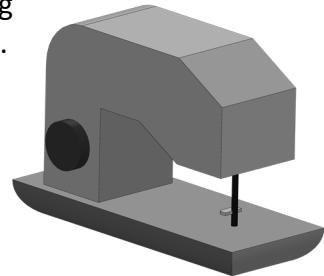
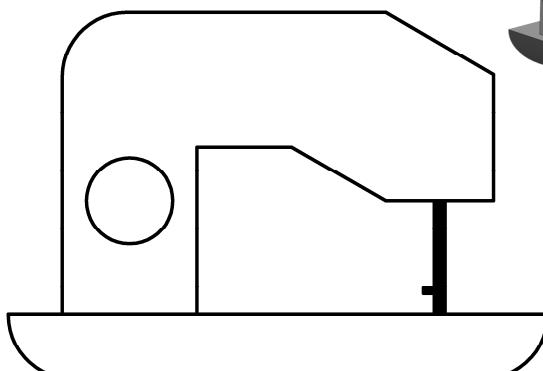
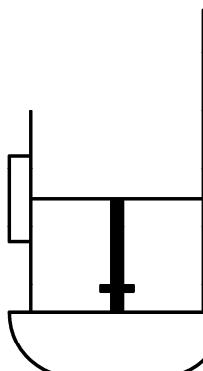
***Examination Number:***

Question	Mark
Section A	
1	
2	
3	
4	
5	
6	
<b>TOTAL</b>	
<b>GRADE</b>	

**SECTION A.** Answer **any ten** questions. All questions carry equal marks.

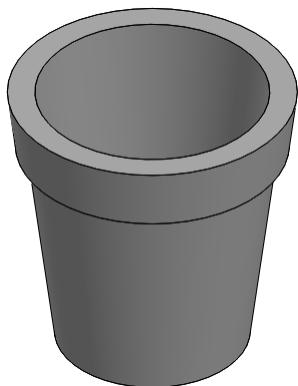
- 1.** Shown is the elevation and **incomplete** end view of a sewing machine. Also shown is a 3D graphic of the sewing machine.

**Insert** the missing lines in the end view.



- 2.** In the space provided, make a **freehand pictorial sketch** of the flower-pot shown below.

Colour **or** shade the completed sketch.



- 3.** Using a **(✓)** identify whether **each** of the following is an Input or Output device.

<b>Input</b>	<b>Device</b>	<b>Output</b>
	Mouse	
	Keyboard	
	Monitor	
	Speakers	
	Scanner	
	Printer	



- 4.** Fig. 1 shows a logo for a satellite TV company inscribed in the square ABCD.

Complete the enlarged logo in the given square ABCD in Fig. 2.

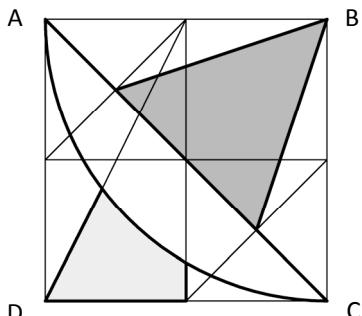


Fig. 1

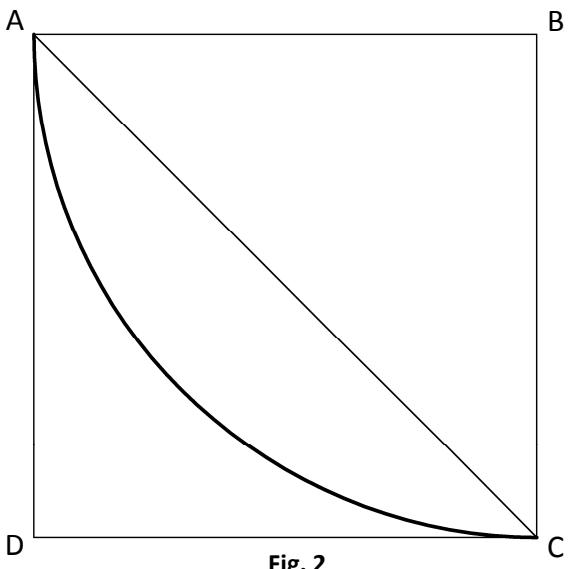


Fig. 2

- 5.** Fig. 1 shows the outline of a bridge based on an ellipse.

**F<sub>1</sub>** and **F<sub>2</sub>** are the focal points of the ellipse.

Locate the focal points in Fig. 2 and complete the outline of the bridge.

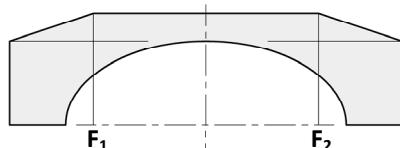


Fig. 1

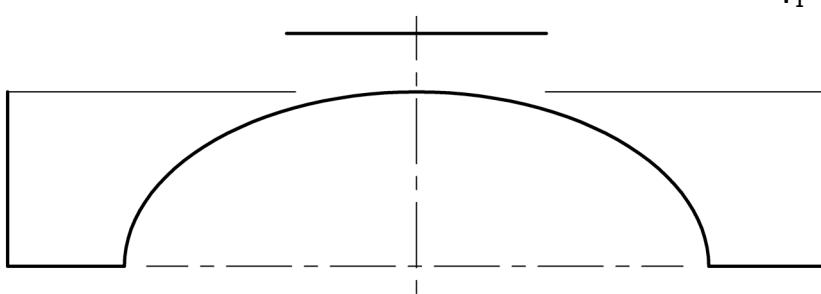
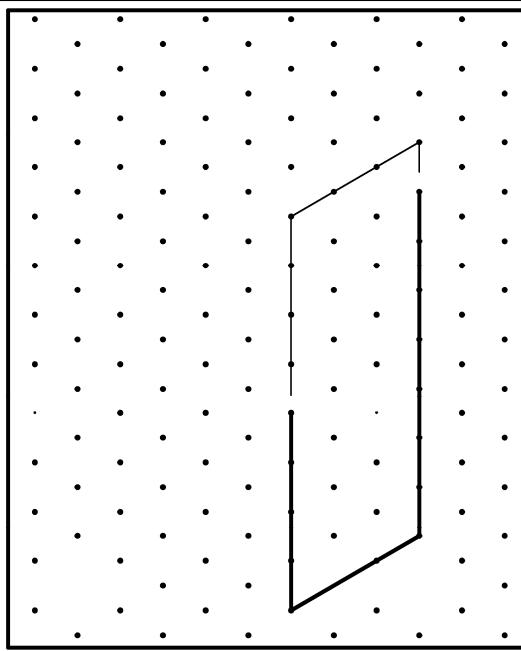
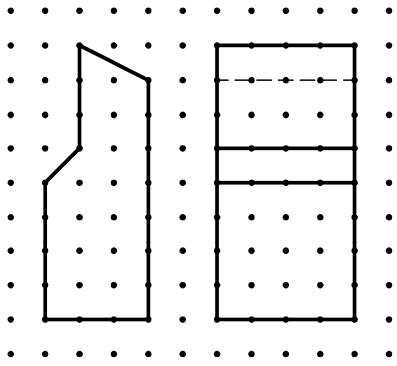


Fig. 2

- 6.** The elevation and end view of an ATM (cash machine) are shown.

Make a well-proportioned freehand sketch of the ATM in the space provided.

Colour or shade the completed sketch.

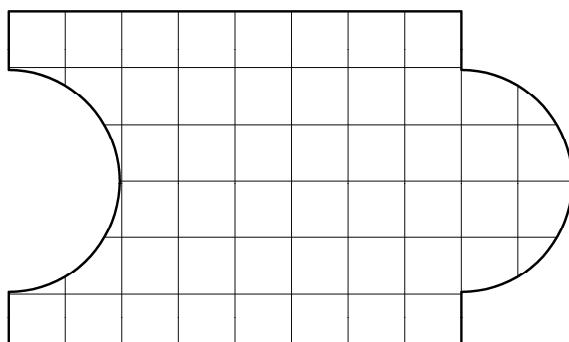
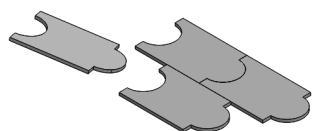


- 7.** The outline of a floor tile design is shown.  
Also shown is a 3D graphic of the floor tiles.

Write down the area of the tile in square units.

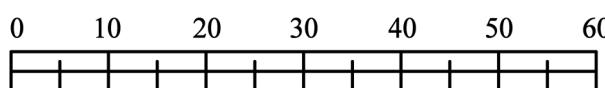
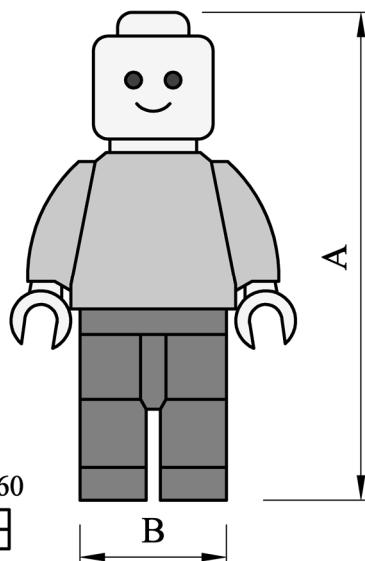
1 square = 1 square unit.

**Area of the tile = \_\_\_\_\_ square units.**



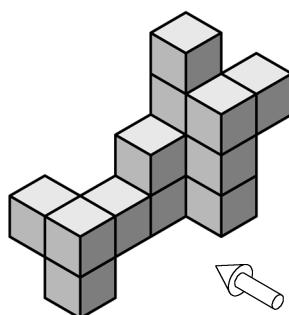
- 8.** Using the scale provided, **measure** and **write down** the dimensions **A** and **B** for the LEGO man shown.

**A:** \_\_\_\_\_

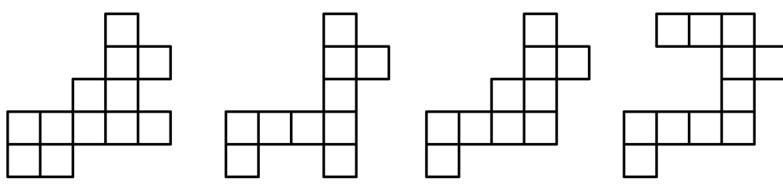


- 9.** Fig.1 shows a set of blocks.

Choose the correct elevation for Fig.1 from the options shown in Fig.2 below.



**Fig. 1**

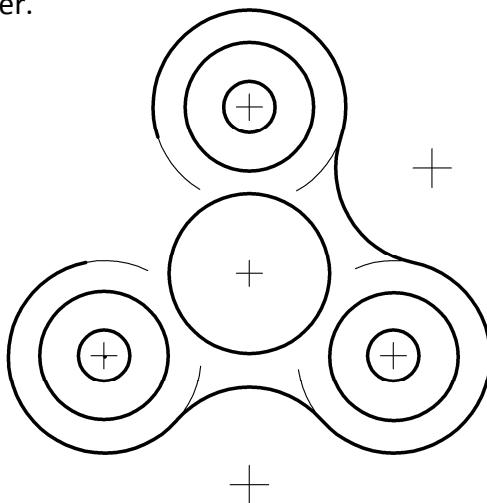


**Answer:** \_\_\_\_\_

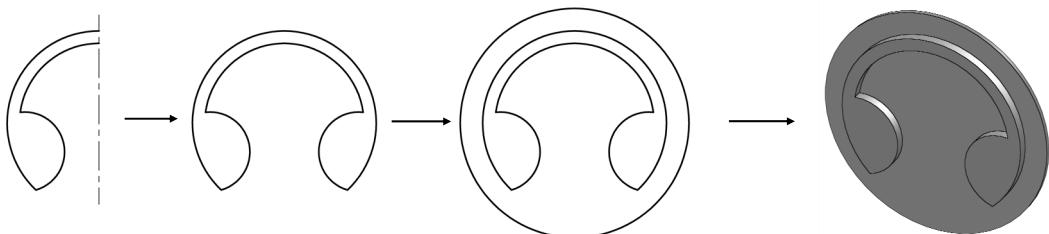
- 10.** The figure on the right shows the incomplete outline of a 'fidget spinner'. Also shown is a 3D graphic of the fidget spinner.

Complete the drawing of the fidget spinner.

Show all construction and **all** points of contact.



- 11.** Write down **any two** CAD commands used to create the drawing of the music app logo.



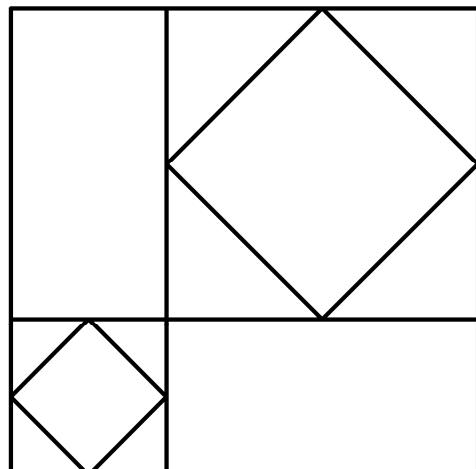
Any **two** CAD commands: \_\_\_\_\_

\_\_\_\_\_

- 12.** Count the number of **squares** and **rectangles** in the diagram.

Squares: \_\_\_\_\_

Rectangles: \_\_\_\_\_



- 13.** Fig. 1 shows the design of a logo for a racing team. The design is based on a regular hexagon.

Fig. 2 shows an **incomplete** drawing of the logo. Complete the drawing showing all construction.

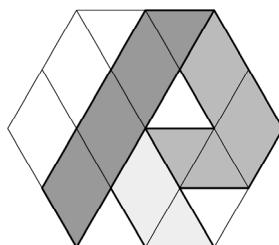


Fig. 1

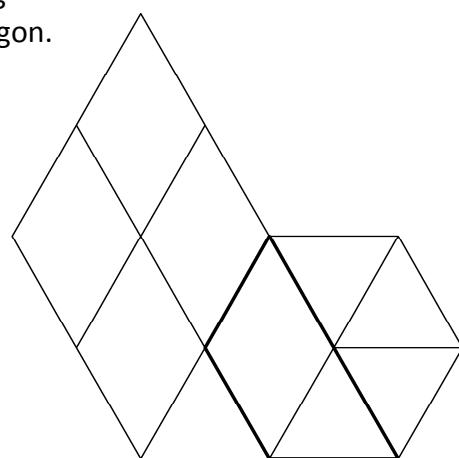
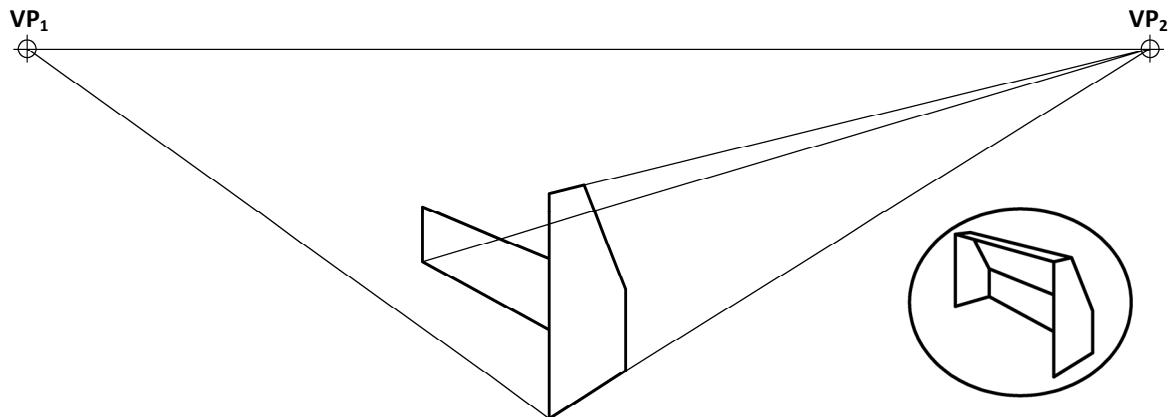


Fig. 2

- 14.** The figure shows an **incomplete** two point perspective drawing of a soccer dug-out. A small 3D graphic of the dug-out is also shown.

Complete the perspective drawing of the dug-out.



- 15.** Fig. 1 shows a logo for WiFi connection.

Complete the design of the logo in Fig. 2 showing **all** construction.

Colour **or** shade the completed logo.

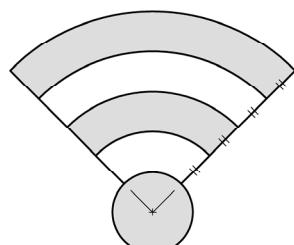


Fig. 1

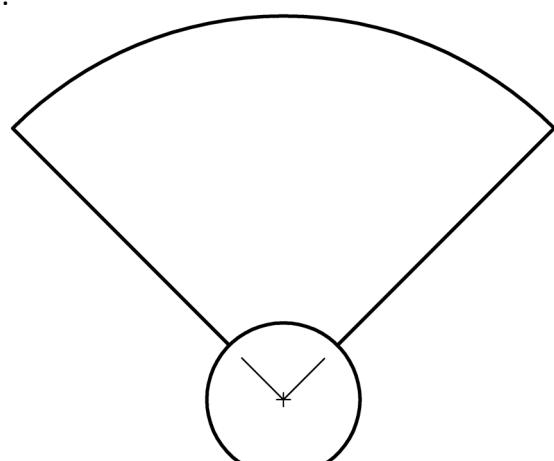


Fig. 2

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