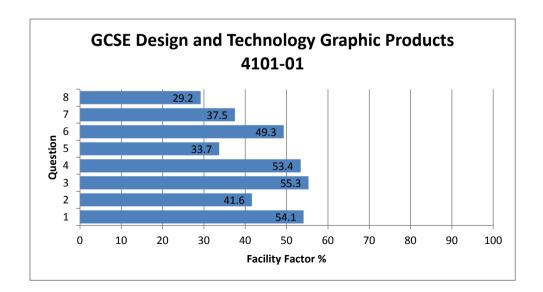


#### **GCSE** Design and Technology Graphic Products 4101-01

?	?	?	?	?	?	?
Question Title	N	Mean	S D	Max Mark	FF	Attempt %
1	2476	8.1	2.8	15	54.1	99.8
2	2476	4.2	2.3	10	41.6	99.8
3	2472	5.5	2.3	10	55.3	99.6
4	2476	13.3	3.8	25	53.4	99.8
5	2470	3.4	2.1	10	33.7	99.6
6	2472	7.4	3	15	49.3	99.6
7	2469	7.5	3.6	20	37.5	99.5
8	2460	4.4	3.1	15	29.2	99.2

All Candidates' performance across questions



#### Section B

10

Marked out of 60

60 minutes

- This question is about Commercial Manufacturing Processes. It is worth a total of 10 marks. 5.
  - There are three stages in commercial printing. Underline the second stage of the (a) (i) process. [1]

#### Finishing On Press

State the method used to cut out the stickers below.



(b) Below is a table of printing processes. Complete the table to identify a product that is printed using each of the processes named. The first has been done for you. [2]

Printing Process	Product
Roto Gravure	Glossy Magazine
Offset Lithography	
Flexography	

|Examiner only

**Pre-Press** 

Examiner Explain what you understand by the term 'imposition'. (C) [2] (i) ..... Describe what happens during the finishing stage of a commercial printing process. (ii) [3] ..... ..... ..... \_\_\_\_\_

11

#### Section B

10

Marked out of 60

60 minutes

5. This question is about Commercial Manufacturing Processes. It is worth a total of 10 marks.

(a) (i) There are three stages in commercial printing. Underline the second stage of the process.
 [1]

#### On Press

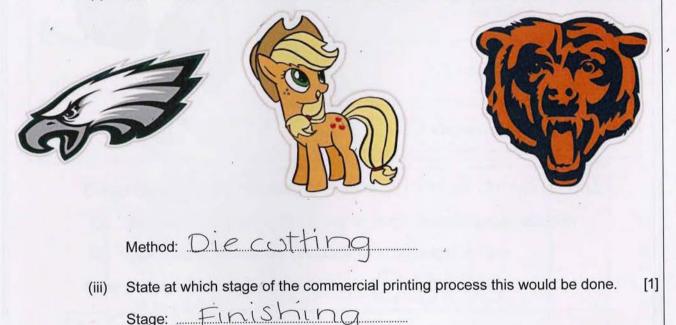
Finishing

**Pre-Press** 

Examiner only

[1]

(ii) State the method used to cut out the stickers below.



(b) Below is a table of printing processes. Complete the table to identify a product that is printed using each of the processes named. The first has been done for you. [2]

Printing Process	Product
Roto Gravure	Glossy Magazine
Offset Lithography	wallpaper
Flexography	carrier boas

Examiner only Explain what you understand by the term 'imposition'. [2] (C) (i) Imposition is adver how the product is kang laid out ar struch ren Describe what happens during the finishing stage of a commercial printing process. (ii) [3] During the finishing stage #### the product is cut to size and is gone through security check to see whether the printing process has gone correctly.

#### **Section B**

10

#### Marked out of 60

60 minutes

- This question is about Commercial Manufacturing Processes. It is worth a total of 10 marks. 5.
  - There are three stages in commercial printing. Underline the second stage of the (a) (i) [1] process.

#### **On Press**

#### Finishing

**Pre-Press** 

Examiner only

[1]

State the method used to cut out the stickers below. (ii)



- State at which stage of the commercial printing process this would be done. [1] (iii) MIM Stage: -1n1
- Below is a table of printing processes. Complete the table to identify a product that is
- (b) printed using each of the processes named. [2] The first has been done for you.

Printing Process	Product
Roto Gravure	Glossy Magazine
Offset Lithography	Wallpaper
Flexography	carrier bags

Examiner only Explain what you understand by the term 'imposition'. [2] (C) (i) Imposition is adver how the product is have laid out an struch reo Describe what happens during the finishing stage of a commercial printing process. (ii) [3] During the finishing stage #### the product is cut to size and is gone through security check to see whether the printing process has gone correctly.

# Section B

Marked out of 60

60 minutes

3

- 5. This question is about Commercial Manufacturing Processes. It is worth a total of 10 marks.
  - (a) (i) There are three stages in commercial printing. Underline the second stage of the process.
     [1]

# On Press Finishing Pre-Press

(ii) State the method used to cut out the stickers below.







Examiner

only

[1]

Method: Die -Cutting

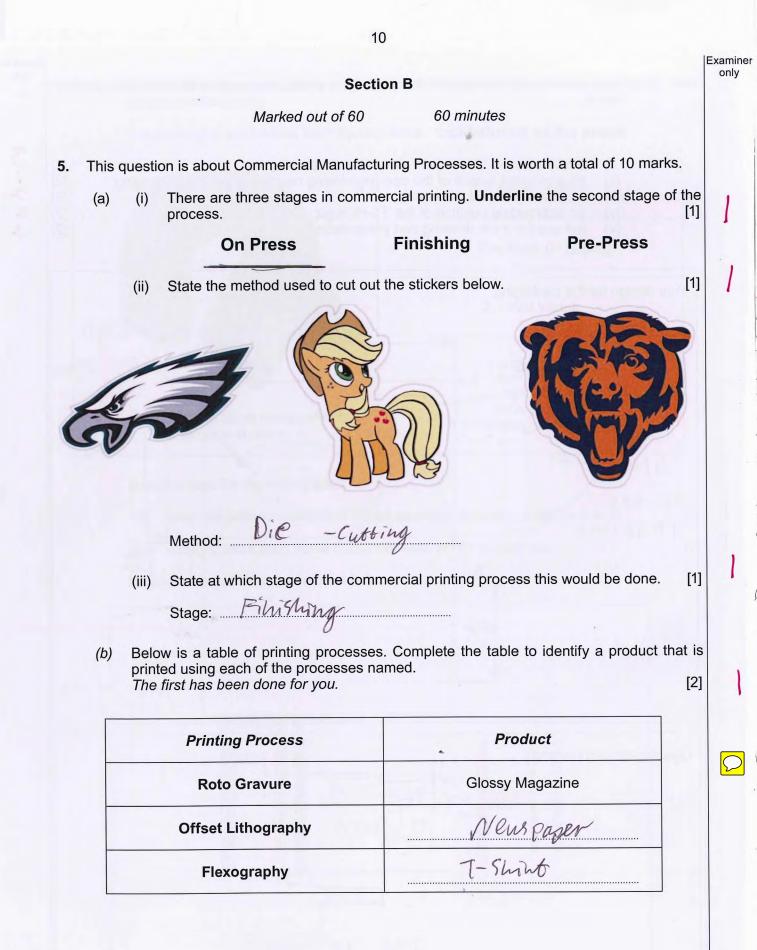
- (iii) State at which stage of the commercial printing process this would be done. [1] Stage: Filmshing
- (b) Below is a table of printing processes. Complete the table to identify a product that is printed using each of the processes named. *The first has been done for you.*[2]

<b>Printing Process</b>	Product	
Roto Gravure	Glossy Magazine	
Offset Lithography	Newspaper	
Flexography	T-Shint	

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11 Examiner only Explain what you understand by the term 'imposition'. (C) [2] (i) Imposition when .... n only one mon Describe what happens during the finishing stage of a commercial printing process. (ii) [3] The Hape ....... Vanishing, proceduls such when 03 die - cubbing. ...... done. . . . . . . . . . . . . . . . . . . Put bogether 1 and finalised. 4101 010011





Examiner only Explain what you understand by the term 'imposition'. (c) (i) [2] O Imposition is when a product is mar from one sheet  $\mathcal{O}$ OWIN of geper, is 16 ble int 0 1de confe Describe what happens during the finishing stage of a commercial printing process. (ii) 2 [3] Ste 13 14 ble noyer Vanishing edu Suc 1604 2 Wh 6he no 15 is bogether , and Pub finalised. 4101 010011

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# Section B

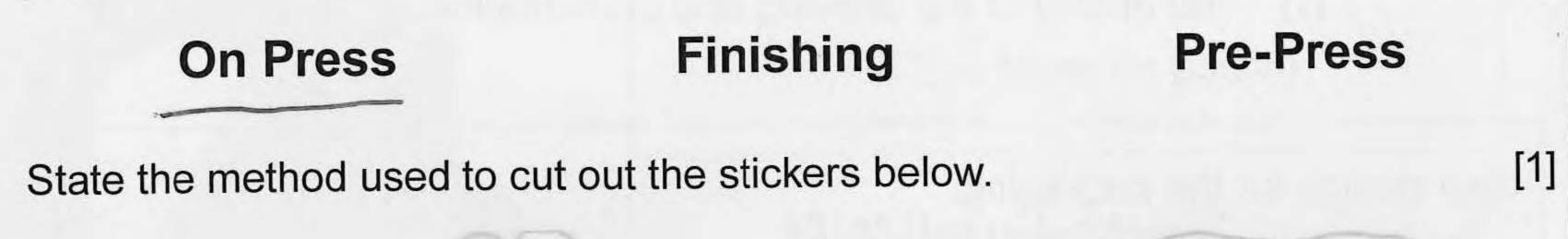
Marked out of 60

(ii)

60 minutes

31

- 5. This question is about Commercial Manufacturing Processes. It is worth a total of 10 marks.
  - (a) (i) There are three stages in commercial printing. Underline the second stage of the process.



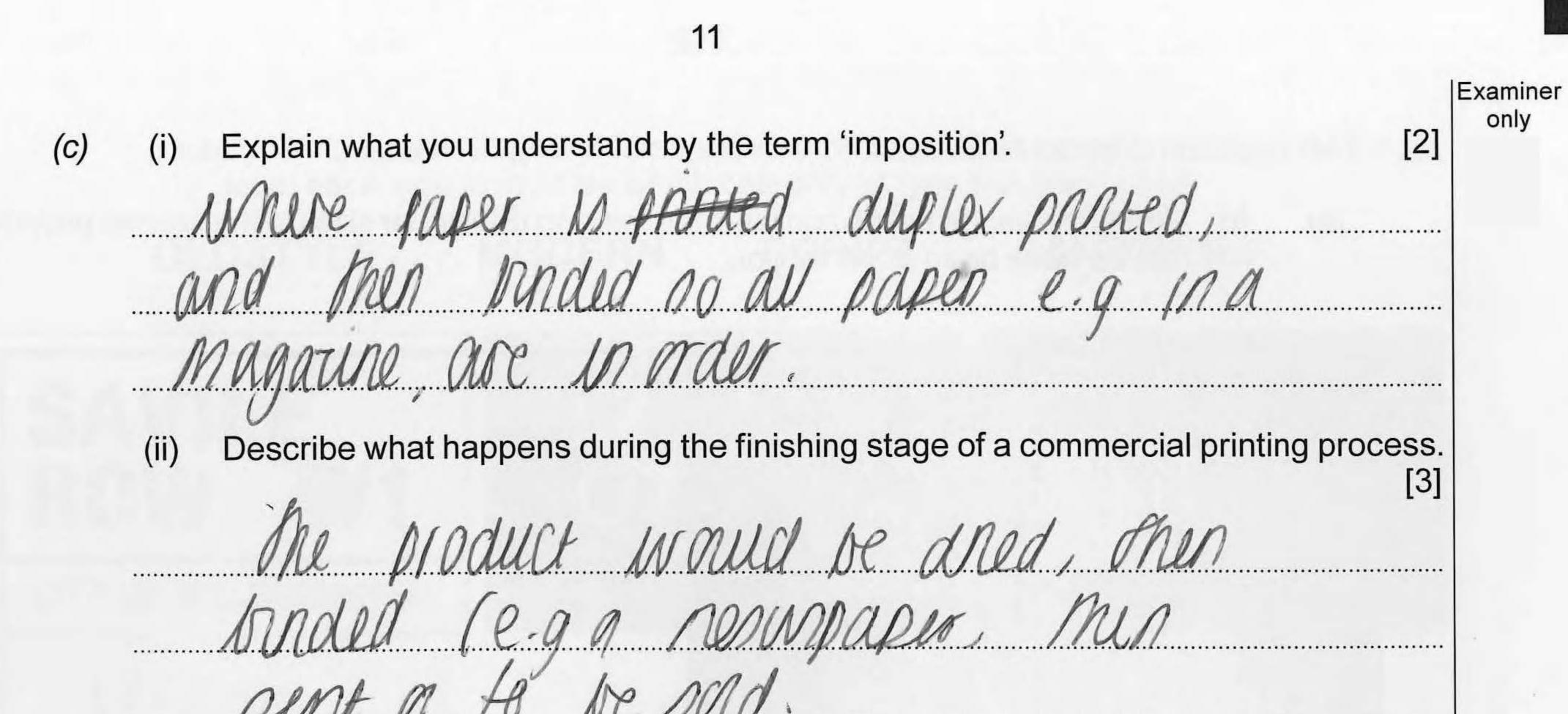
Examiner only



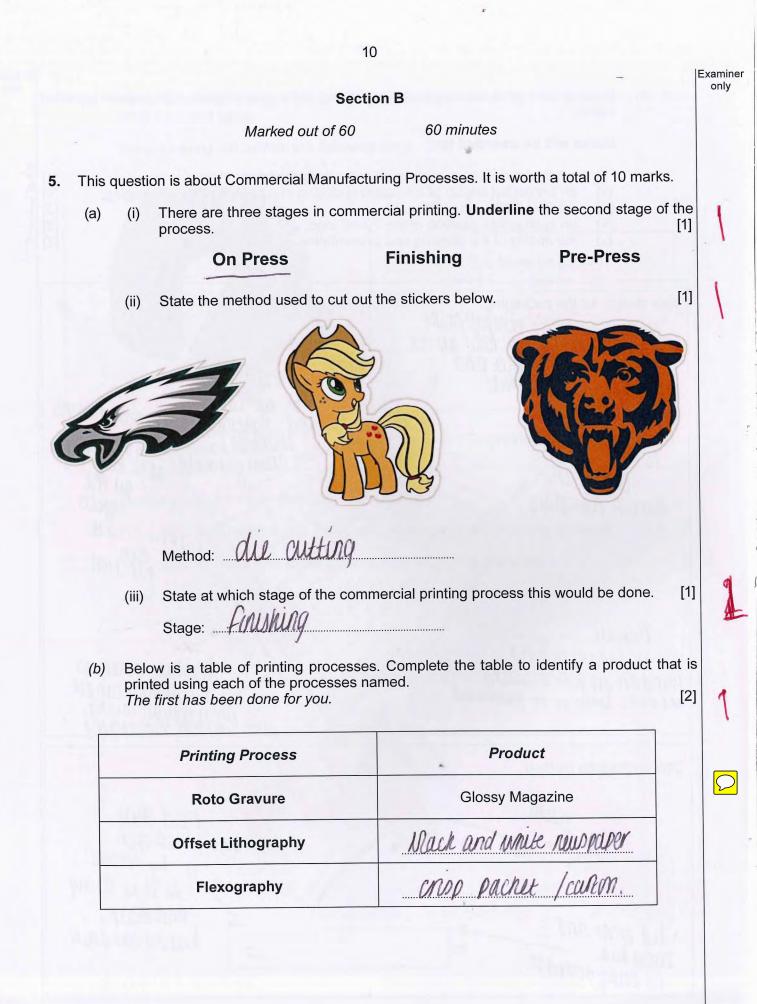
# Method: du cutting

- (iii) State at which stage of the commercial printing process this would be done. [1] Stage: Fulling
- (b) Below is a table of printing processes. Complete the table to identify a product that is printed using each of the processes named.
   [2] The first has been done for you.

Printing Process	Product	
Roto Gravure	Glossy Magazine	
Offset Lithography	Mack and white ruspaper	
Flexography	crisp packet /callon.	



4101 01001 Turn over. © WJEC CBAC Ltd. (4101-01)



Examiner only Explain what you understand by the term 'imposition'. [2] (C) (i) where paper is parted duplex proted, and then Innded no all paper e.g. in a  $\mathcal{O}$ Magazine ave in order. Describe what happens during the finishing stage of a commercial printing process. (ii) [3] he product would be dred, then buded (e.g. a neruspaper, Mun sent of the second. 4101 010011

[3]

only

Label the illustrations below of different pencil grades. State which of the grades in the red

This question is about Tools, Equipment and Making. It is worth a total of 20 marks.

box is the hardest grade, the softest grade and the hard black (HB).

7.

(a)

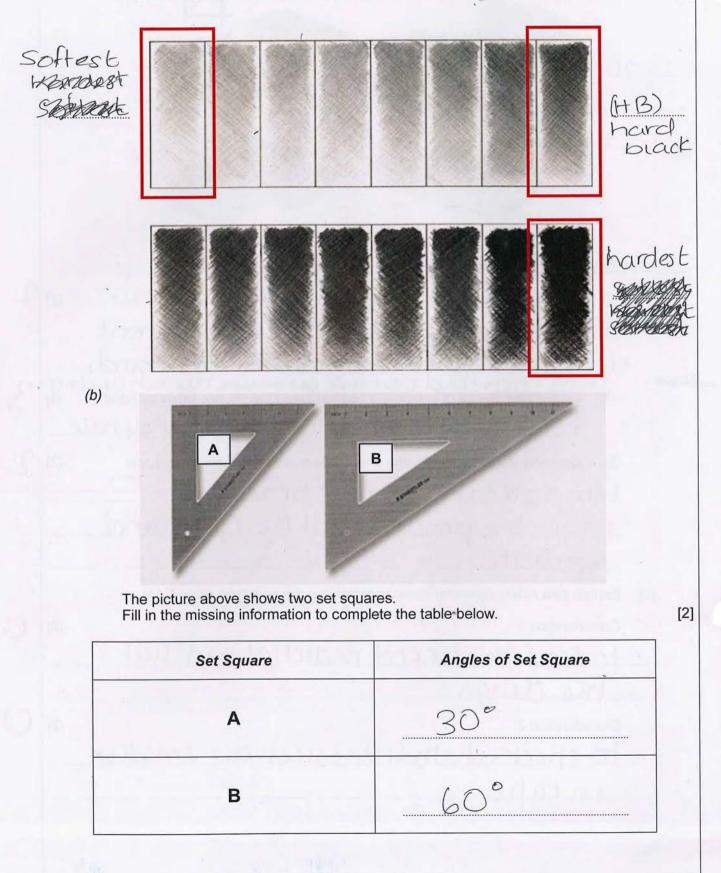
(b) В The picture above shows two set squares. Fill in the missing information to complete the table below. [2] Angles of Set Square Set Square Α В Turn over. (4101-01) © WJEC CBAC Ltd.

(C)	The images below show a prototype for a box in net form and folded into shape prototype was made out of 500 micron boxboard.	. The
	Outline how the following step would be done by hand.	
	(i) Scoring and Folding.	[2]
	<ul> <li>(ii) State three pieces of equipment needed to cut the net out safely by hand.</li> <li>1</li></ul>	[3]
	(iii) Describe the benefits of using a template to make multiple prototypes.	[2]
(d)	Explain <b>two</b> safety considerations when making the prototype using CAM.	
	Consideration 1:	[2]
	Consideration 2:	[2]

7. This question is about Tools, Equipment and Making. It is worth a total of 20 marks.

15

(a) Label the illustrations below of different pencil grades. State which of the grades in the red box is the **hardest** grade, the **softest** grade and the **hard black (HB)**. [3]

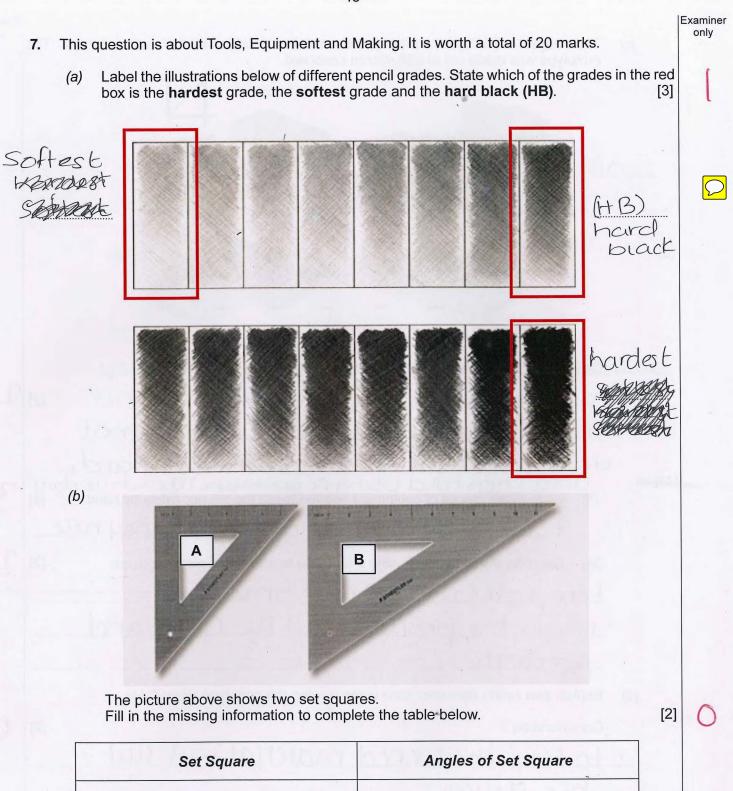


© WJEC CBAC Ltd. (4101-01)

Examiner only

- Examiner only
- (c) The images below show a prototype for a box in net form and folded into shape. The prototype was made out of 500 micron boxboard.

Outline how the following step would be done by hand. (i) Scoring and Folding [2] using a craft knife and a cutting mat and score halfway through the board, and men fold using a craftic in the while darg. State three pieces of equipment needed to cut the net out safely by hand. [3] and (ii) 1 Craft Enife 2 cutting mak 3 saftey rule Describe the benefits of using a template to make multiple prototypes. (iii) [2] tempates would save hme and make the products all the same and accurate Explain two safety considerations when making the prototype using CAM. (d)Consideration 1: [2] see if the correct material will suit the design. **Consideration 2:** [2] to check whether the sizes are imaller IN raho.



Set Square	Angles of Set Square
Α	30°
В	600

Turn over.

(c)	The images below show a prototype for a box in net form and folded into shape. The prototype was made out of 500 micron boxboard.	ne Examiner
	Outline how the following step would be done by hand.	
	(i) Scoring and Folding.	2] 2
*	using a craft knife and a cutting mat	
uatero		3] 3
	1 Craft Enife 2 cuttingmat 3 satter rule	
		2] 2
	tempates would save home and	
	make the products all he same and	
	accurate.	
(d)	Explain <b>two</b> safety considerations when making the prototype using CAM.	
		2]
	to see if the correct material will suit	
	me design.	
		2]
	to check whether the sizes are smaller	
	in raho.	

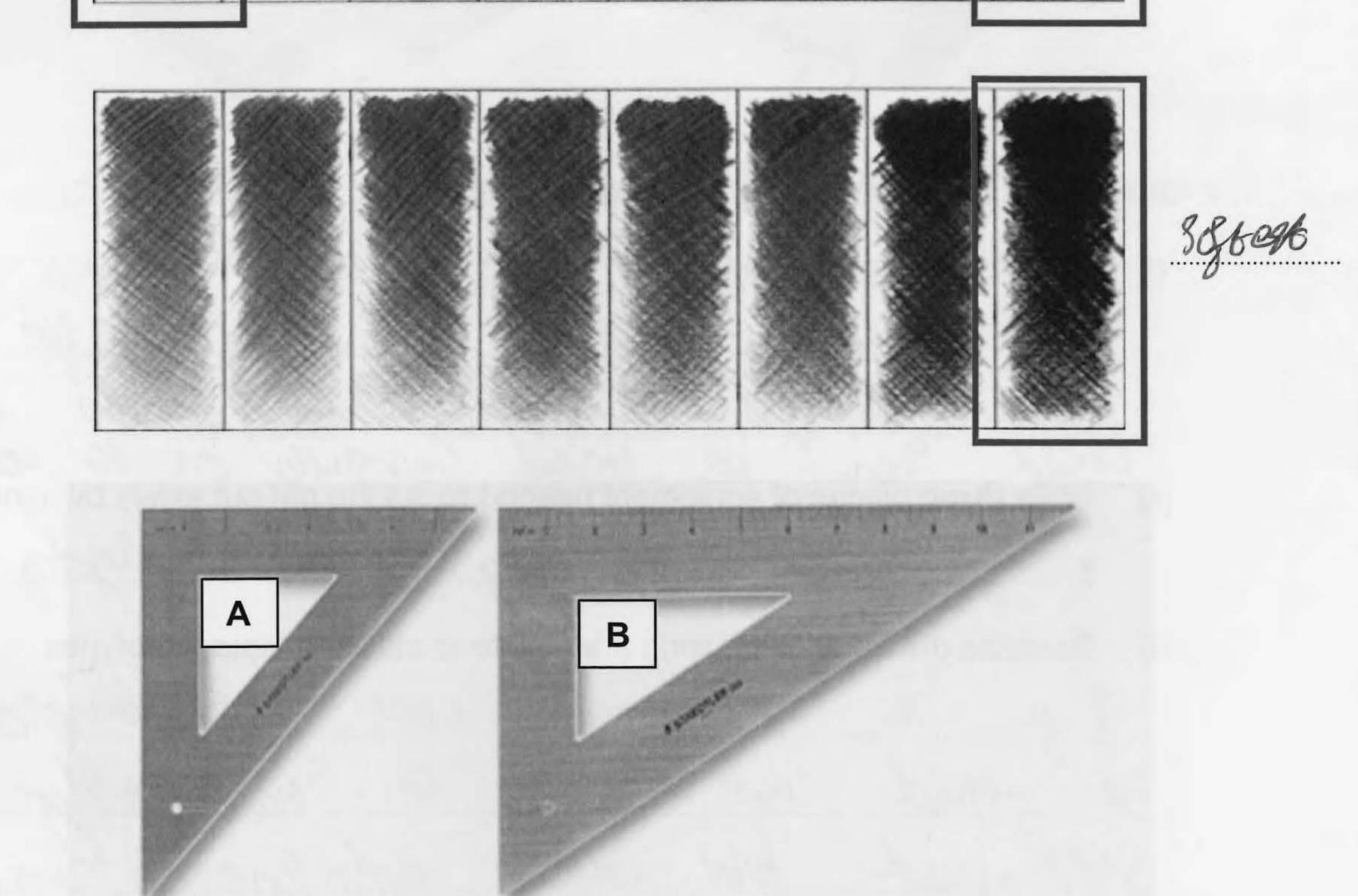
3

Examiner

only

- 7. This question is about Tools, Equipment and Making. It is worth a total of 20 marks.
  - (a) Label the illustrations below of different pencil grades. State which of the grades in the red box is the hardest grade, the softest grade and the hard black (HB). [3]

Hard



(b)

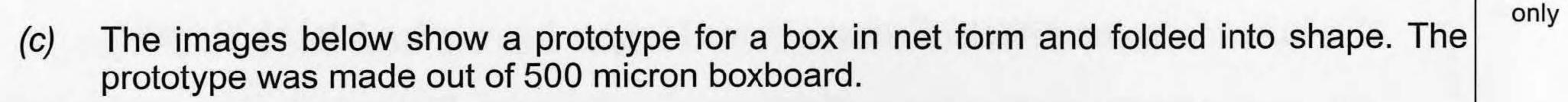
The picture above shows two set squares. Fill in the missing information to complete the table below.

Set Square	Angles of Set Square
A	450
B	60°, 30°

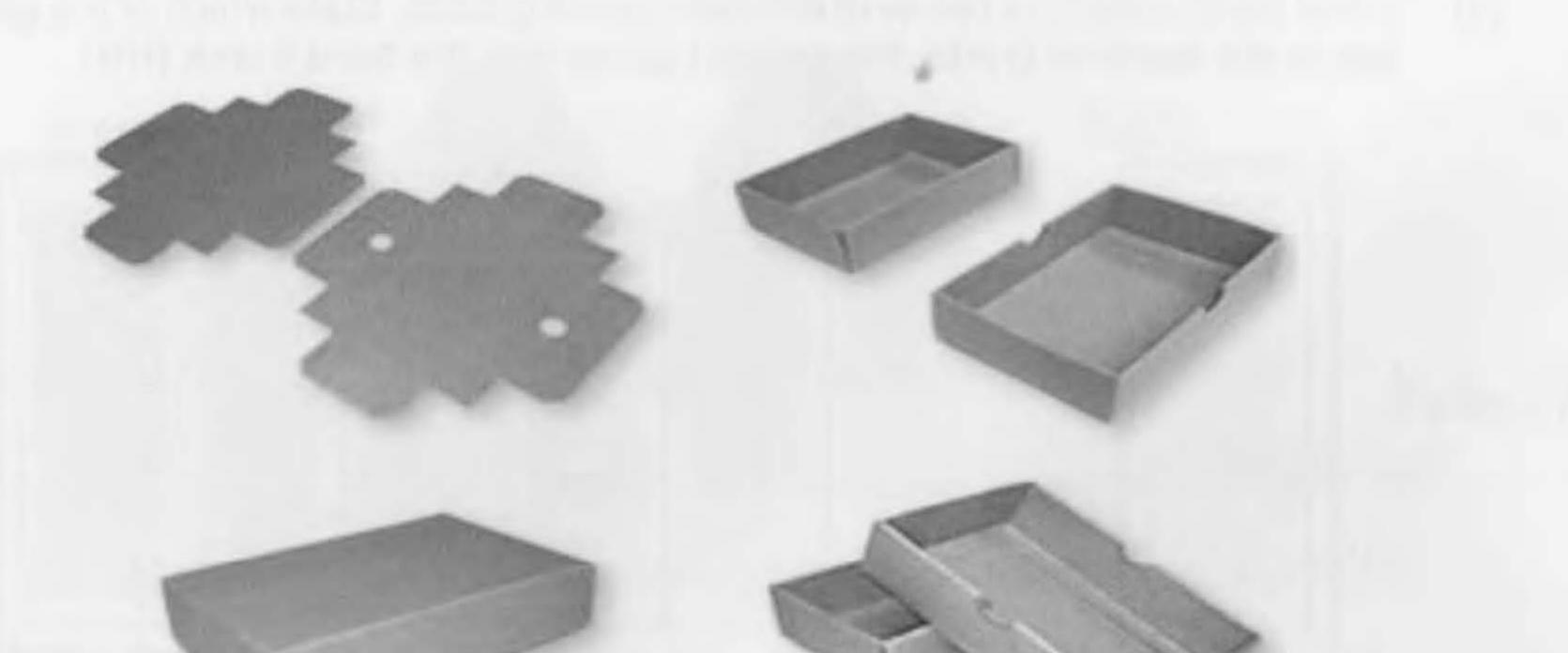
Turn over.

[2]

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Examine



16

Outline how the following step would be done by hand.

Scoring and Folding. [2] (i) would (ii) State three pieces of equipment needed to cut the net out safely by hand. [3] Creft trife 2 Safety Mat 3 Sofety Describe the benefits of using a template to make multiple prototypes. [2] (iii) (d) Explain two safety considerations when making the prototype using CAM. [2] **Consideration 1:** fe hadrine it is a Alwark example. 1001 Consideration [2] treep all good and drinks as bley lan auge dan

© WJEC CBAC Ltd.

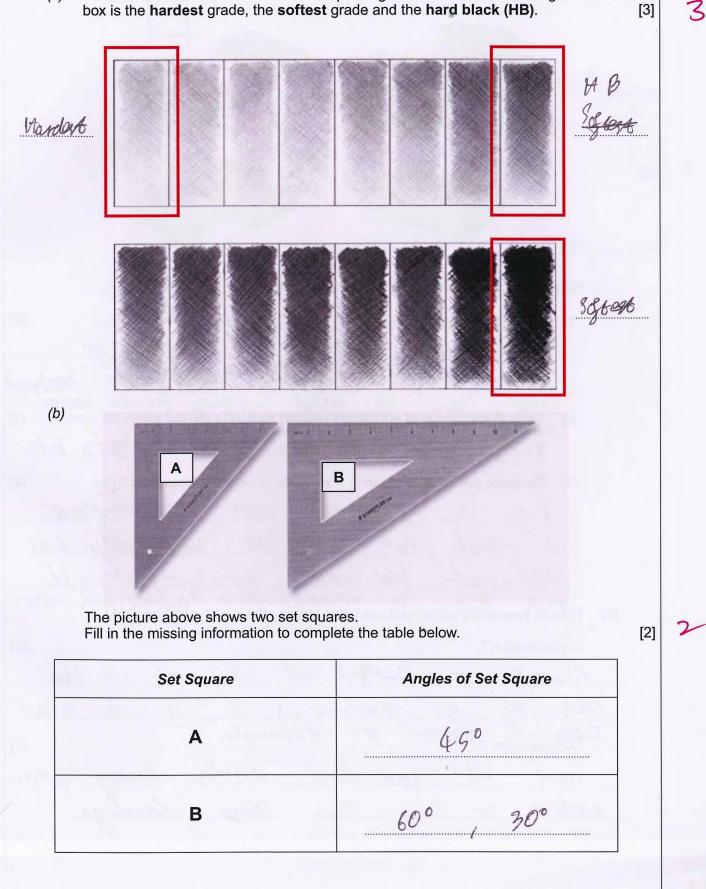
17 Examiner only Explain what the following tools are used for when using CAD packages. (e) **Crop Tool** [2] (i) art and **Clone Tool** [2] (ii) The done 6001 lobs a designer dyplicate an object, or i and use it multiple times in the Save cor a different elosign.

\$



This question is about Tools, Equipment and Making. It is worth a total of 20 marks. 7.

Label the illustrations below of different pencil grades. State which of the grades in the red (a) box is the hardest grade, the softest grade and the hard black (HB). [3]



(4101-01)

Examiner only

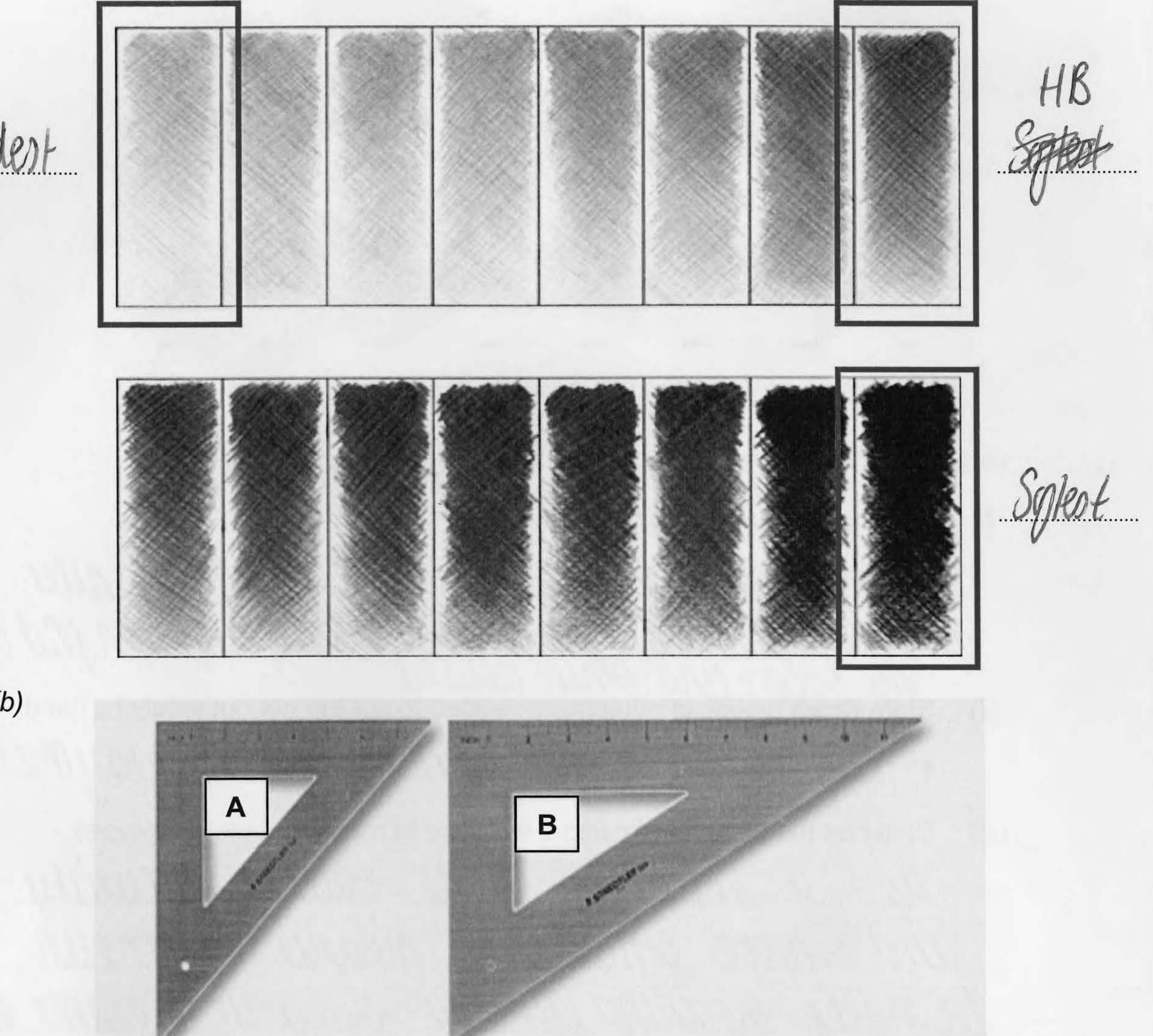
(c) The images below show a prototype for a box in net form and folded into shape. The prototype was made out of 500 micron boxboard.	Examine only
Outline how the following step would be done by hand.[2](i) Scoring and Folding.[2]	1
First detted score uses would be	$\bigcirc$
(ii) State three pieces of equipment needed to cut the net out safely by hand. [3] 1 Creft trife 2 Safety Mat 3 Sefety Rule	3
(iii) Describe the benefits of using a template to make multiple prototypes. [2]	1
If a designer uses a benglate, he would not hed to manually aut,	$\bigcirc$
(d) Explain two safety considerations when making the prototype using CAM.	
Consideration 1: [2]	0
Always be caregal not to get in the	
alley of the madrice is it is a laser	
Consideration 2: Nother for example. [2]	0
trees all good and drinks anay from machines as they can cause damage.	
mennes as ster can cause damage.	

Examiner only Explain what the following tools are used for when using CAD packages. (e) Crop Tool [2] (i) The crop tool lets a designer art away any unnambed areas from an abject for image i) Clone Tool [2] (ii) The done tool lots a day dypliceate an object, or i and use it multiple times in the Same cor a different ebsign,

© WJEC CBAC Ltd.

- This question is about Tools, Equipment and Making. It is worth a total of 20 marks. 7.
  - Label the illustrations below of different pencil grades. State which of the grades in the red box is the hardest grade, the softest grade and the hard black (HB). [3] (a)

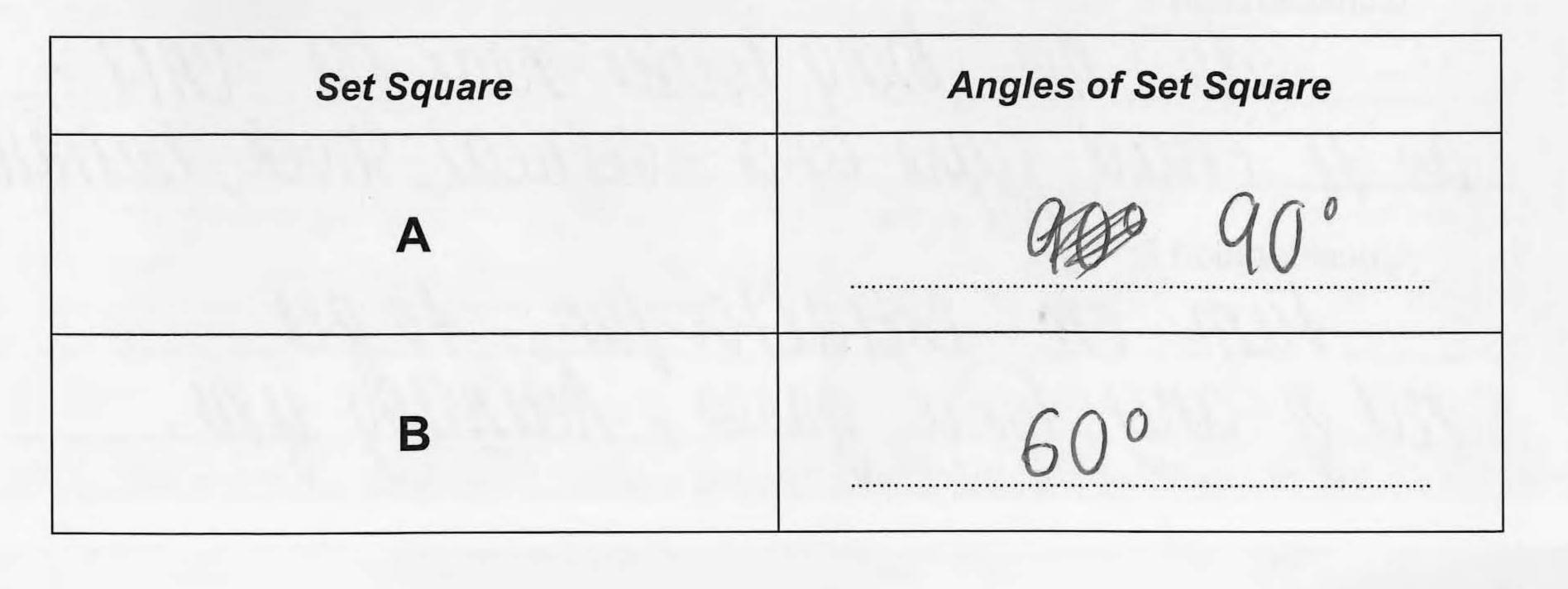
the state of the state of the



Examiner only

(b)

The picture above shows two set squares. Fill in the missing information to complete the table below.

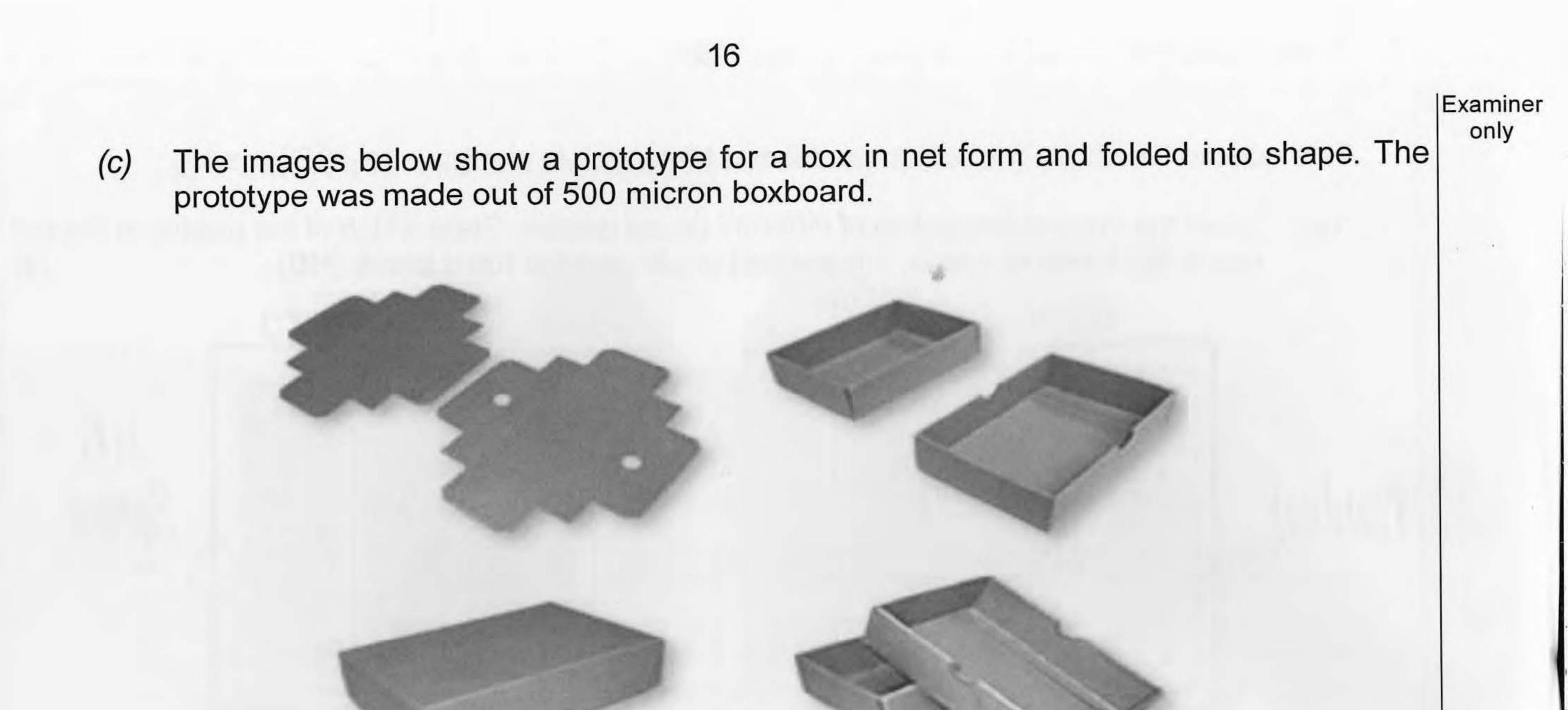


(4101-01)

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Turn over.

[2]

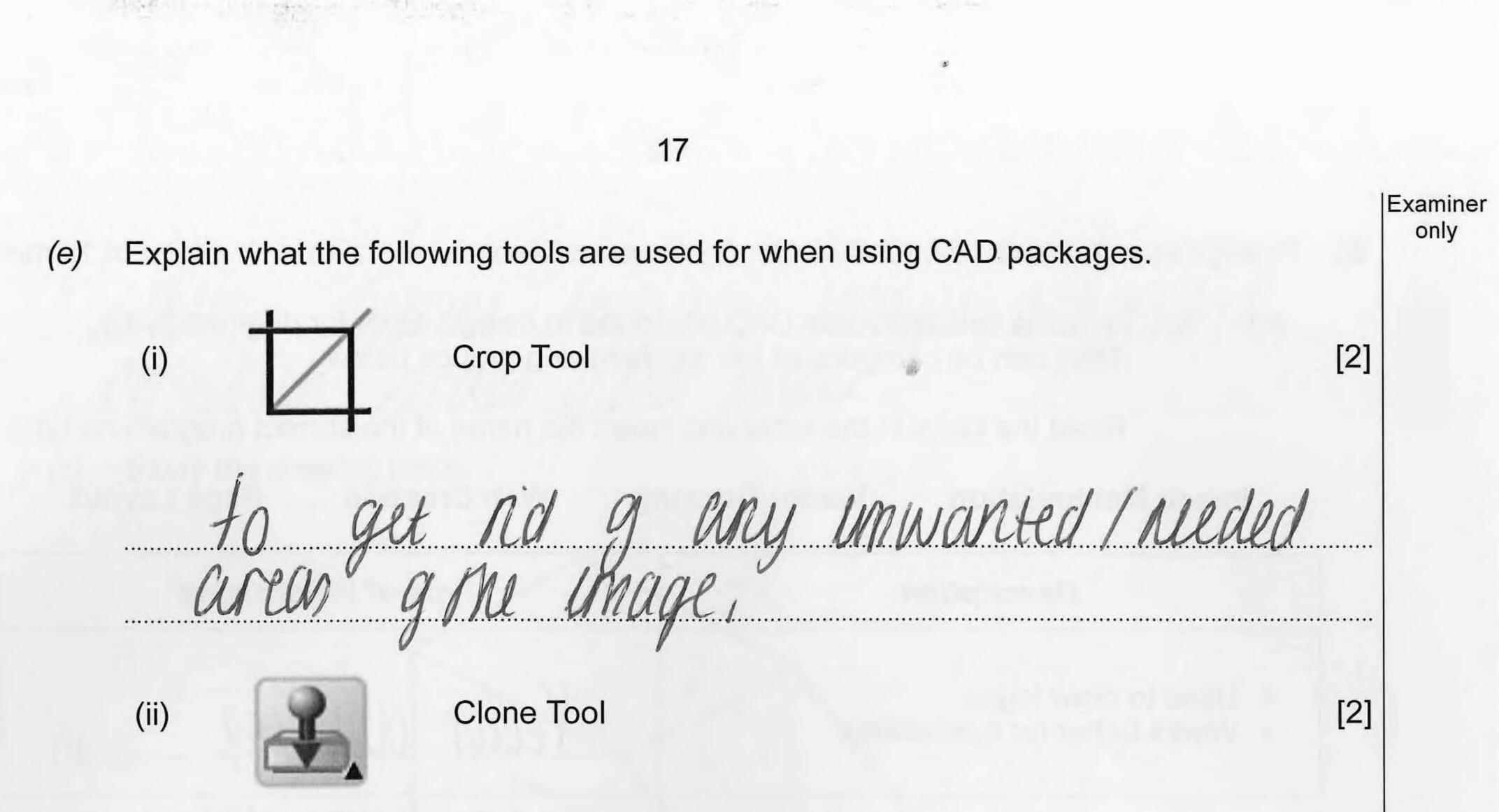


Outline how the following step would be done by hand.

[2] Scoring and Folding. (i) Mye, Sayty Metal riler t cereauly then fold on State three pieces of equipment needed to cut the net out safely by hand. [3] (ii) 2 Safety metal ruler 3 Sajetyma 1 ..... Describe the benefits of using a template to make multiple prototypes. [2] (iii) can be done guichty, ne ynanear, meaning more can

Explain two safety considerations when making the prototype using CAM. (d) [2] Consideration 1: water near the caue and electrical shock, harmi **Consideration 2:** [2] TXIC gases, har

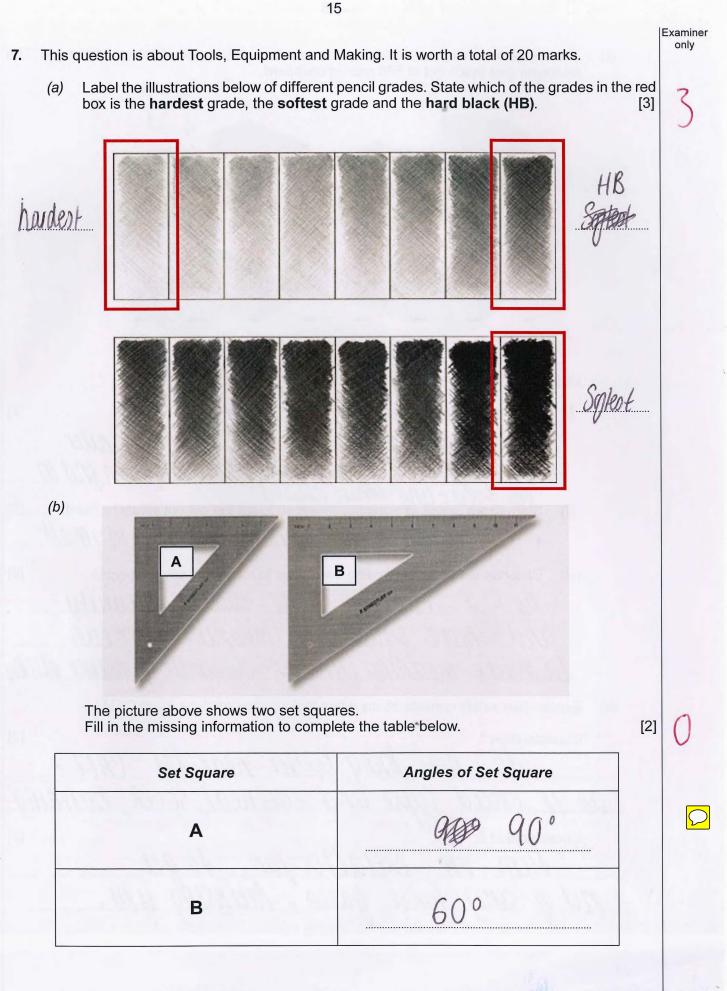
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to replicate the image so you have an exact copy.

Turn over.

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prototype was made out of 500 micron boxboard.

(C)

The images below show a prototype for a box in net form and folded into shape. The

Examiner only

Outline how the following step would be done by hand. [2] Scoring and Folding (i) reta nuer cerearly then Ind on NNU State three pieces of equipment needed to cut the net out safely by hand. [3] (ii) 2 Darty metal ruler 3 Sarety It Kaye 1 .... Describe the benefits of using a template to make multiple prototypes. [2] (iii) be done quickly, accur Meaning more Mantent, In can duminate probleme and Explain two safety considerations when making the prototype using CAM. (d)

[2] **Consideration 1:** , narming **Consideration 2:** [2]

Examiner only Explain what the following tools are used for when using CAD packages. (e) Crop Tool (i) [2] to get rid g any unwanted/rieded areas g me image,  $\mathcal{D}$ **Clone Tool** (ii) [2] e en exact copy.

Examiner only

- 8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.
  - (a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

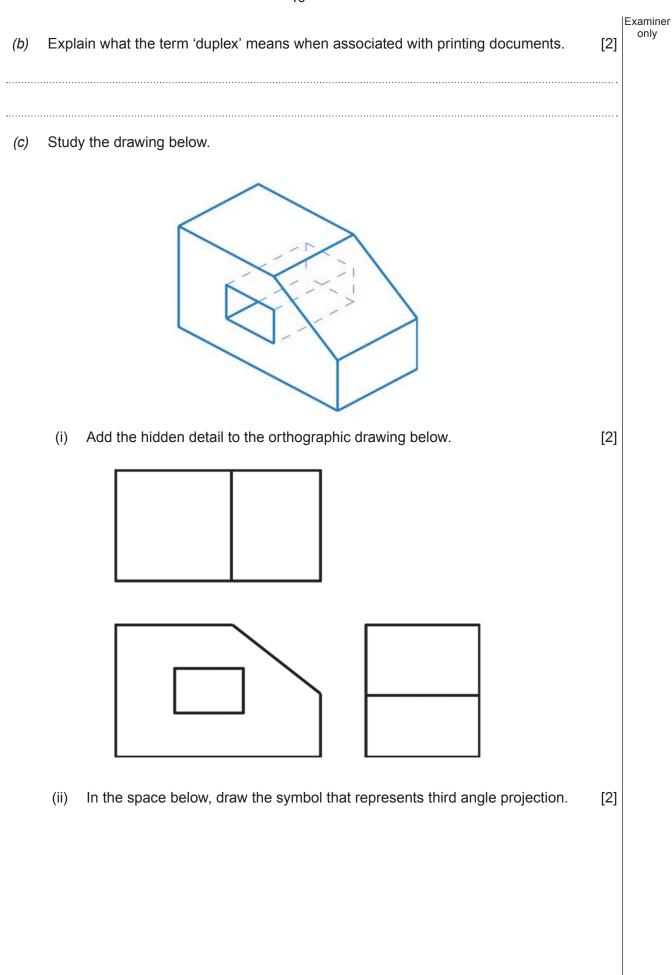
Image Manipulation Vector Drawing Web Creation Page Layout

Description	Type of Programme
<ul><li>Used to draw logos.</li><li>Works better for typesetting.</li></ul>	
<ul> <li>This type of programme uses pixels or dots of colour.</li> <li>Sometimes called raster packages.</li> </ul>	
<ul> <li>Is a form of DTP.</li> <li>Allows multiple editors to develop a document at the same time.</li> </ul>	

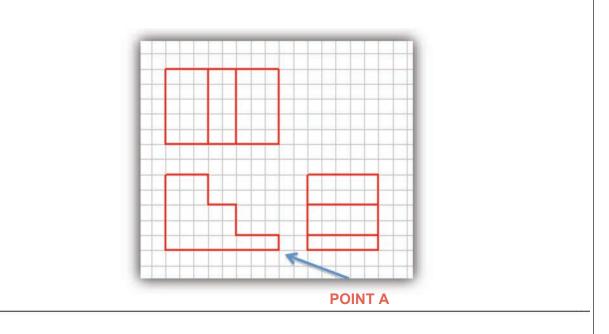
(ii) The following image is to be saved to the web.
 State the file format that would be best to save the image to a website.

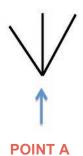


Format [1]



(d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you.
 (Leave all construction lines visible and estimate any sizes.) [5]





#### **END OF PAPER**

8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.

18

(a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner only

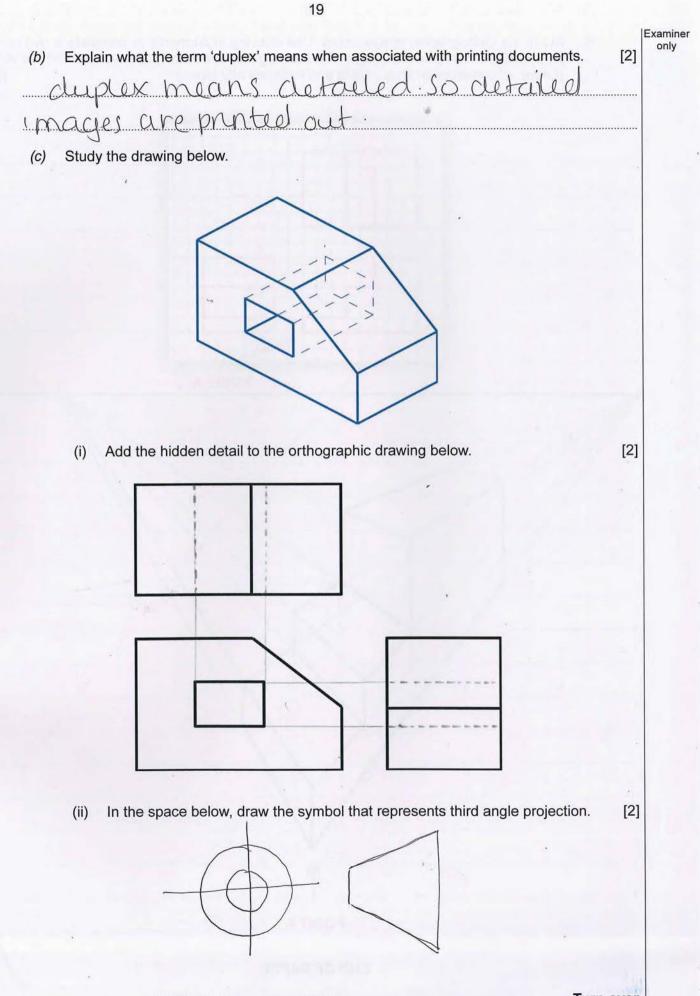
Description	Type of Programme	
<ul><li>Used to draw logos.</li><li>Works better for typesetting.</li></ul>	vector drawing [1]	
<ul> <li>This type of programme uses pixels or dots of colour.</li> <li>Sometimes called raster packages.</li> </ul>	image manipulation the present [1]	
<ul> <li>Is a form of DTP.</li> <li>Allows multiple editors to develop a document at the same time.</li> </ul>	web creation boacege managatedoam	

(ii) The following image is to be saved to the web.

State the file format that would be best to save the image to a website.



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Turn over.

- 20
- Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you. (Leave all construction lines visible and estimate any sizes.) [5] (d)

POINT A

#### **END OF PAPER**

POINT A

- 8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.
  - (a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner only

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Image Manipulation Vector Drawin	ng Web Creation Page Layout	
Description	Type of Programme	
<ul><li>Used to draw logos.</li><li>Works better for typesetting.</li></ul>	vector drawing [1]	
<ul> <li>This type of programme uses pixels or dots of colour.</li> <li>Sometimes called raster packages.</li> </ul>	mage manipulation	
<ul> <li>Is a form of DTP.</li> <li>Allows multiple editors to develop a document at the same time.</li> </ul>	web creation bookerge materipaterbooking	

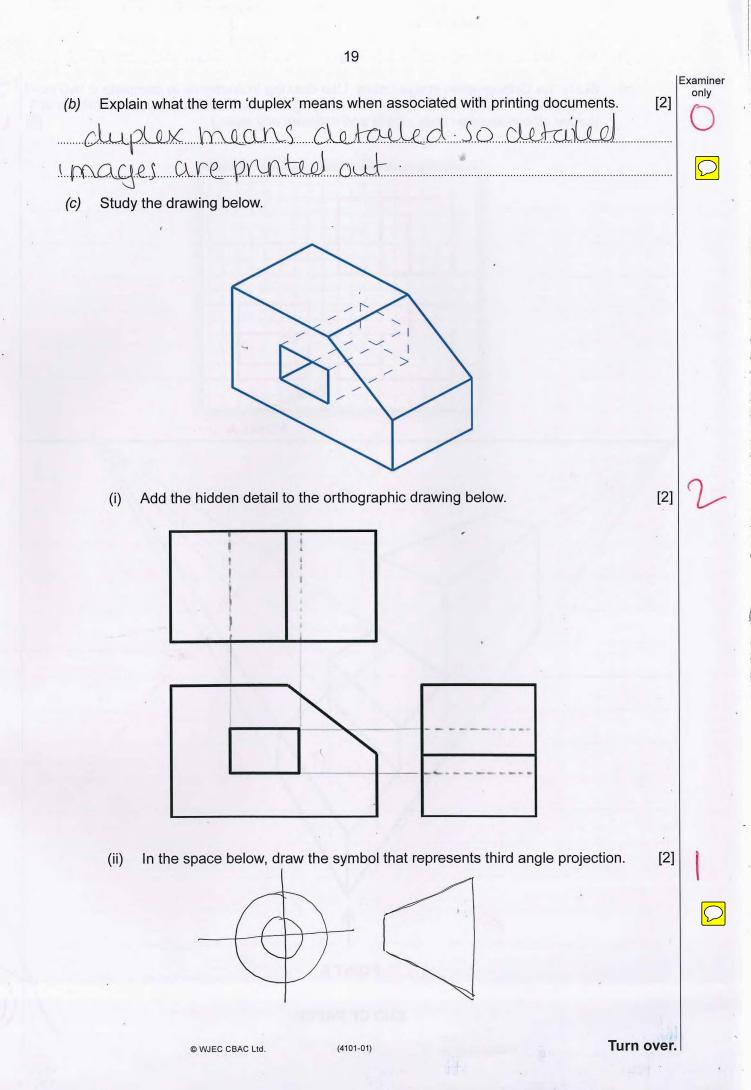
(ii) The following image is to be saved to the web.

State the file format that would be best to save the image to a website.

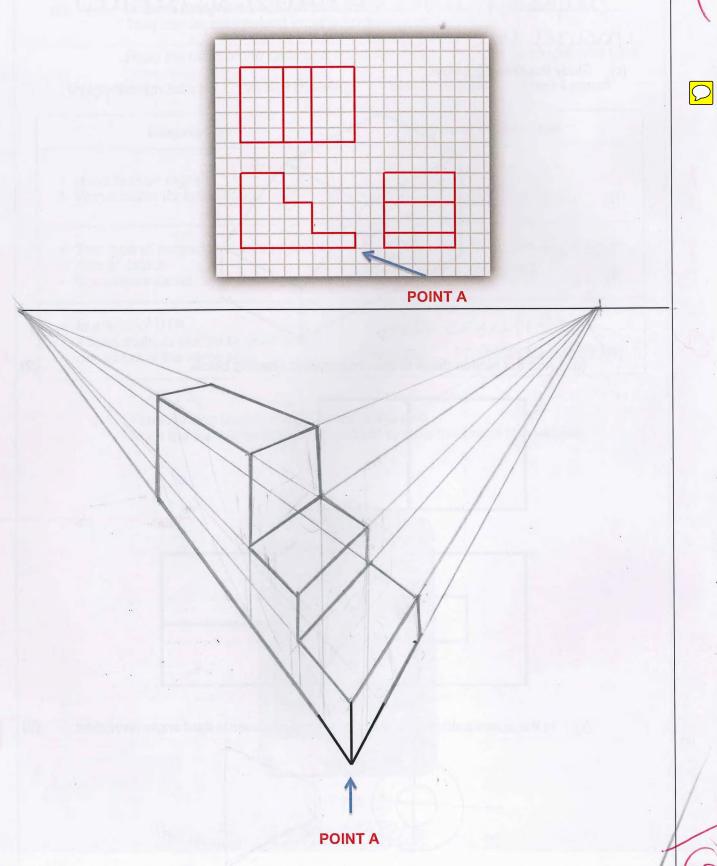


HTML AX Format ... .... [1]

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- 20
- (d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you.
   (Leave all construction lines visible and estimate any sizes.)



#### **END OF PAPER**

- 8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.
  - (a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner

only

Image Manipulation	Vector Drawing	Web Creation	Page Layout
Description		Type of Pro	gramme
<ul> <li>Used to draw logos.</li> <li>Works better for typesett</li> </ul>	ing.	vector	Drawing [1]

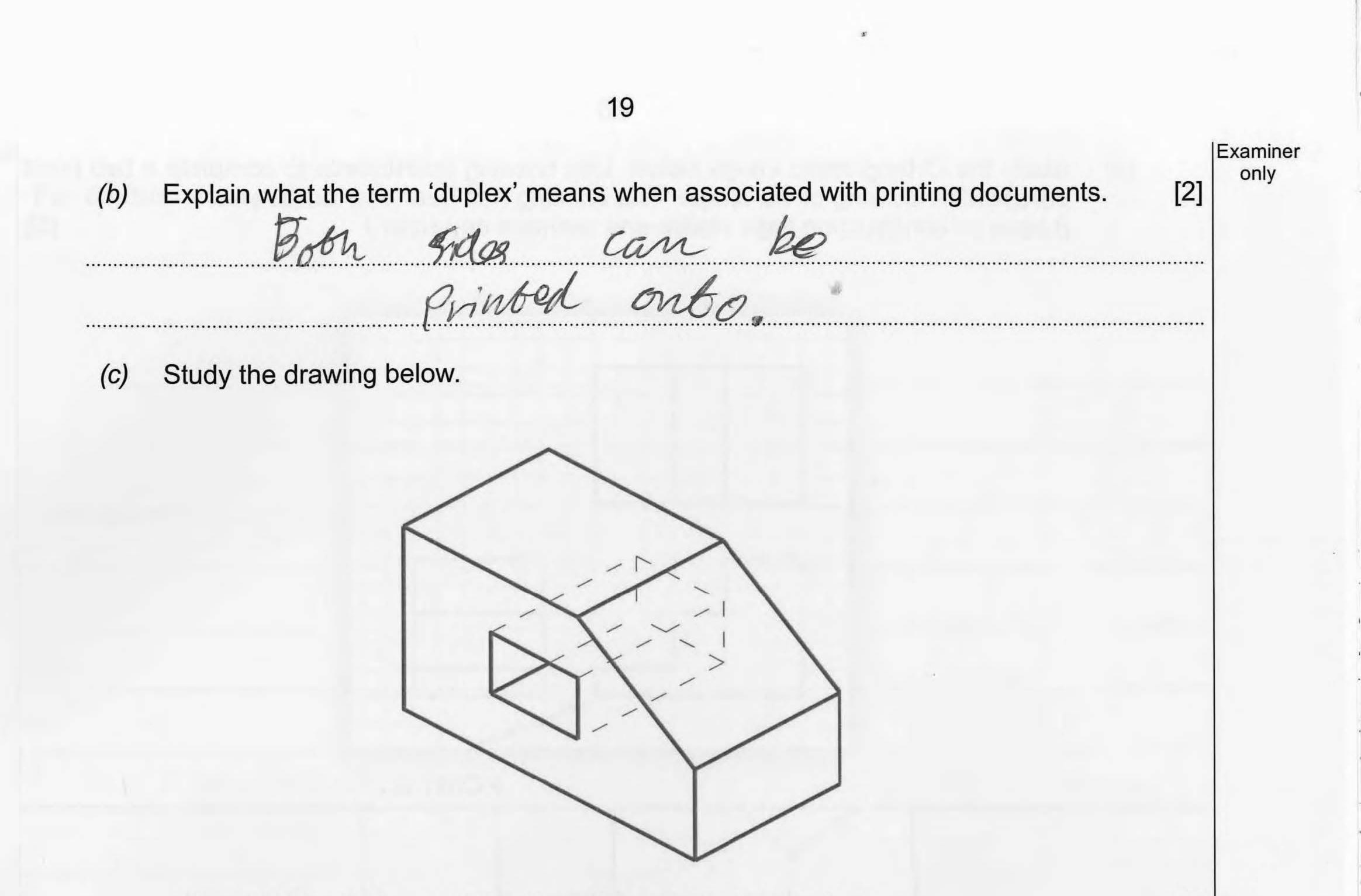
 This type of programme uses pixels or dots of colour. Imene Manipulation[1] • Sometimes called raster packages. Is a form of DTP. • Allows multiple editors to develop a document at the same time. [1]

(ii) The following image is to be saved to the web.State the file format that would be best to save the image to a website.

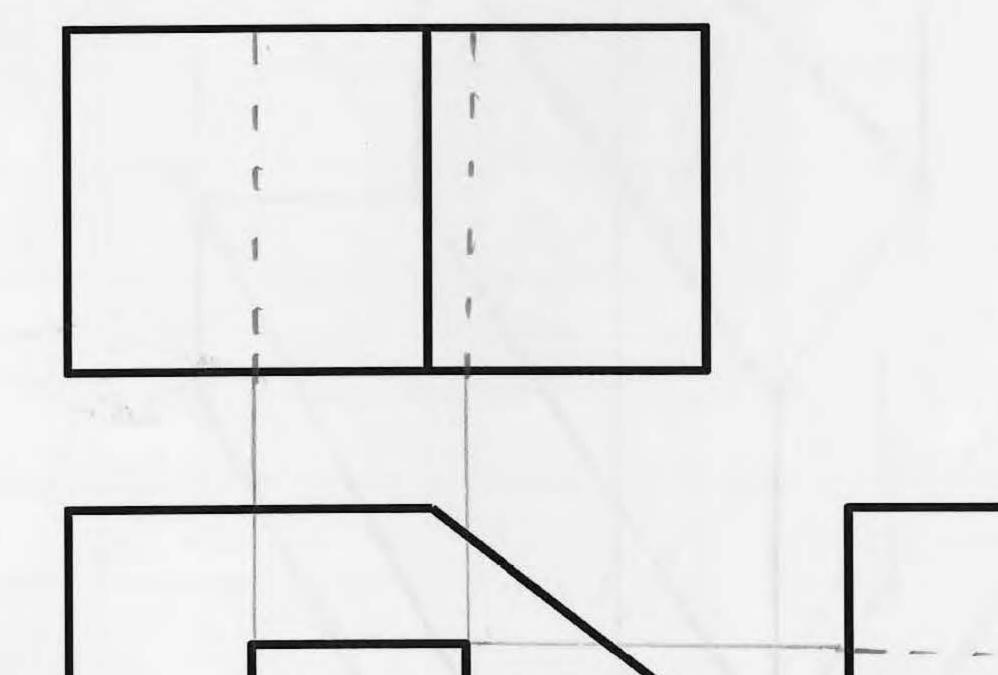


JPEG Format [1]

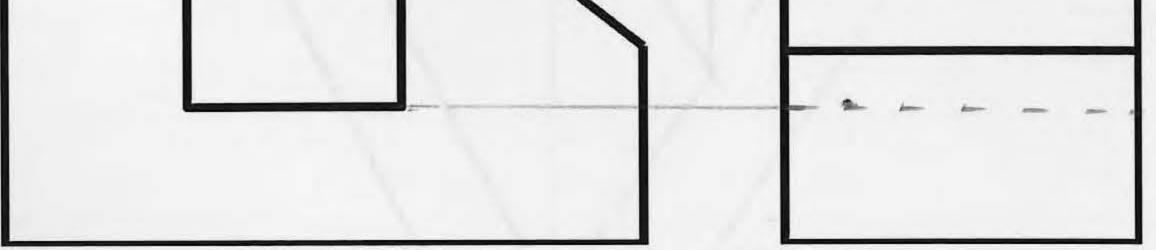
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(i) Add the hidden detail to the orthographic drawing below.



[2]



(ii) In the space below, draw the symbol that represents third angle projection.

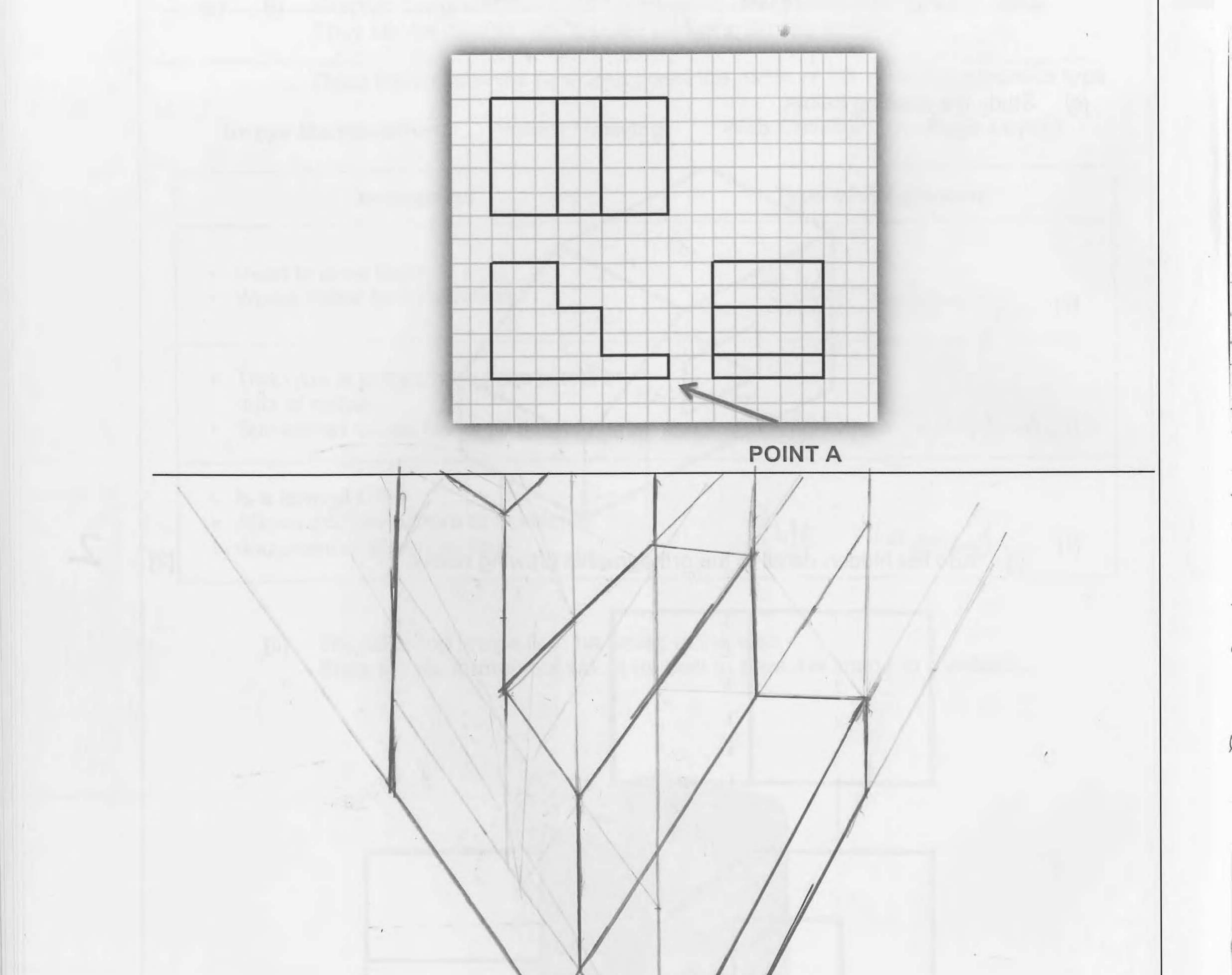
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(4101-01)

Turn over.

[2]

- 20
- (d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you. (Leave all construction lines visible and estimate any sizes.) [5]



# POINT A

## **END OF PAPER**

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8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.

18

(a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner only

Image Manipulation Vector Drawing Web Creation Page Layout

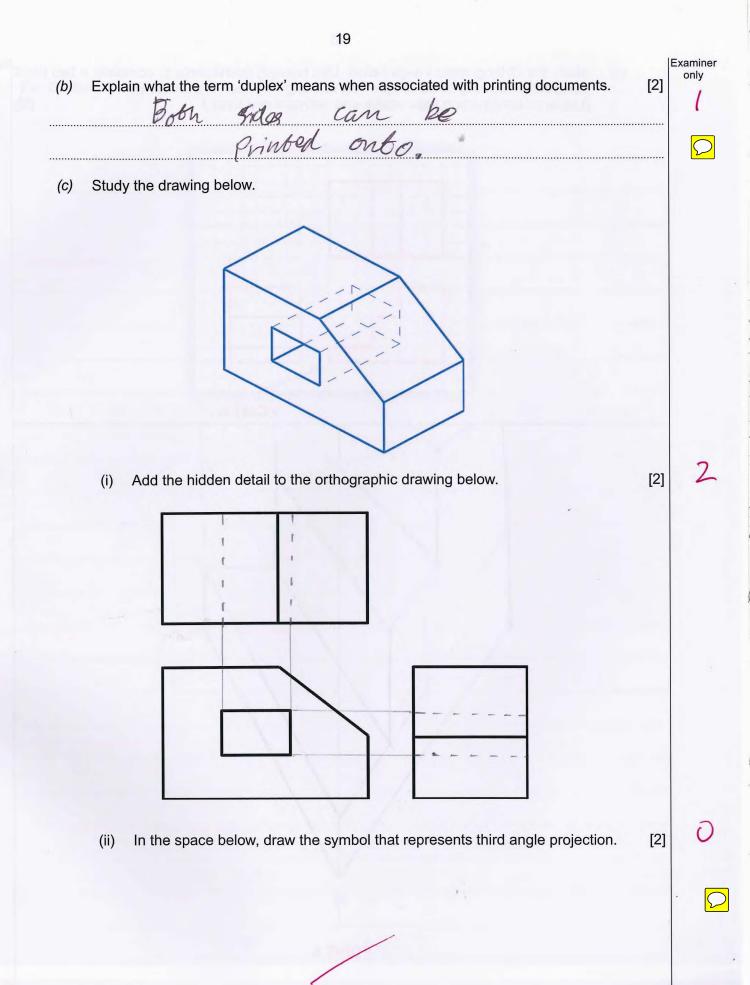
Description	Type of Programme
<ul><li>Used to draw logos.</li><li>Works better for typesetting.</li></ul>	Vector Drawing [1]
<ul> <li>This type of programme uses pixels or dots of colour.</li> <li>Sometimes called raster packages.</li> </ul>	Imege Manipulation[1]
<ul> <li>Is a form of DTP.</li> <li>Allows multiple editors to develop a document at the same time.</li> </ul>	Page Layout [1]

(ii) The following image is to be saved to the web.
 State the file format that would be best to save the image to a website.

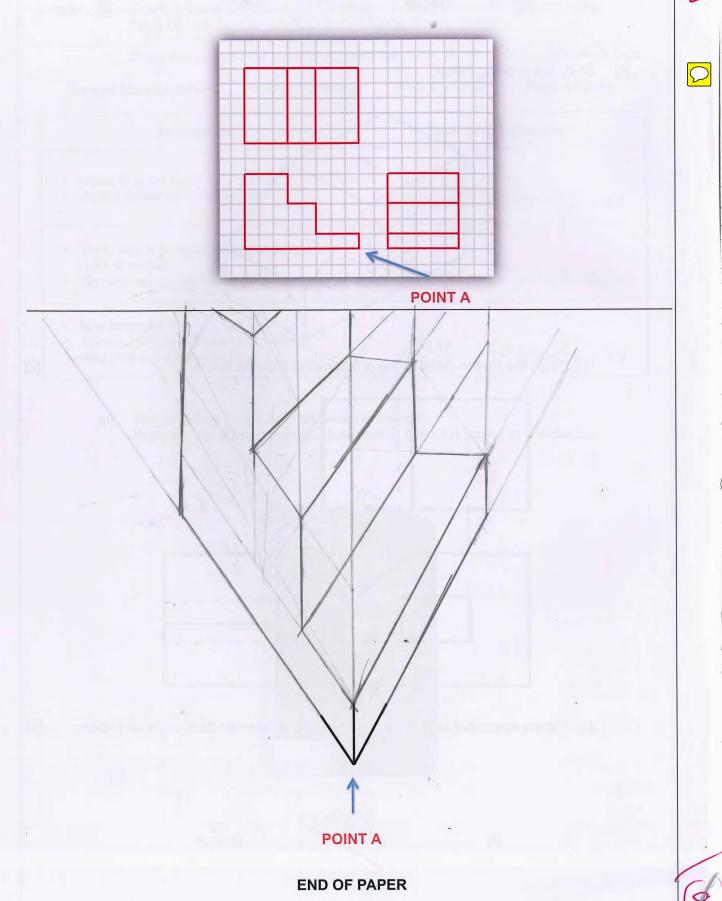


JPEG Format .....

[1]



(d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you.
 (Leave all construction lines visible and estimate any sizes.)



- 8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.
  - (a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner

only

Image Manipulation	Vector Drawing	Web Creation	Page Layout
Description		Type of Programme	
<ul> <li>Used to draw logos.</li> <li>Works better for typesetti</li> </ul>	ng.	Vector draw	ving [1]

IMAGE Manupulation This type of programme uses pixels or dots of colour. Sometimes called raster packages. [1] Is a form of DTP. • eb areation Allows multiple editors to develop a ۰ document at the same time. [1]

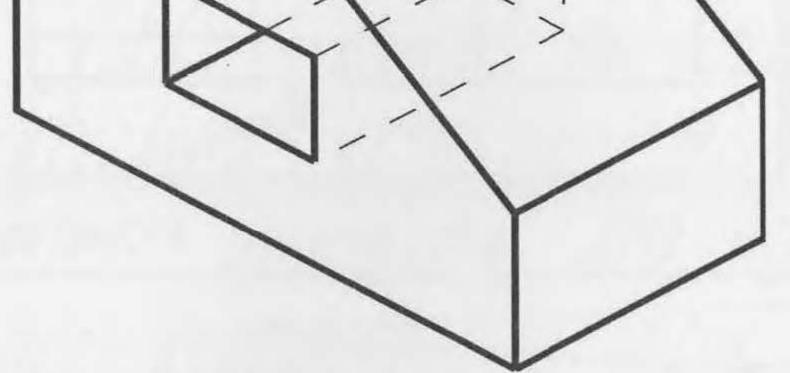
(ii) The following image is to be saved to the web.State the file format that would be best to save the image to a website.



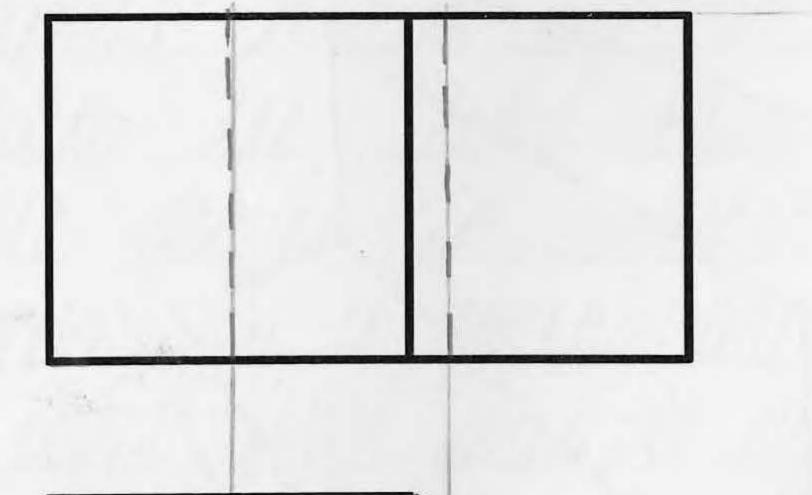
[1] Format

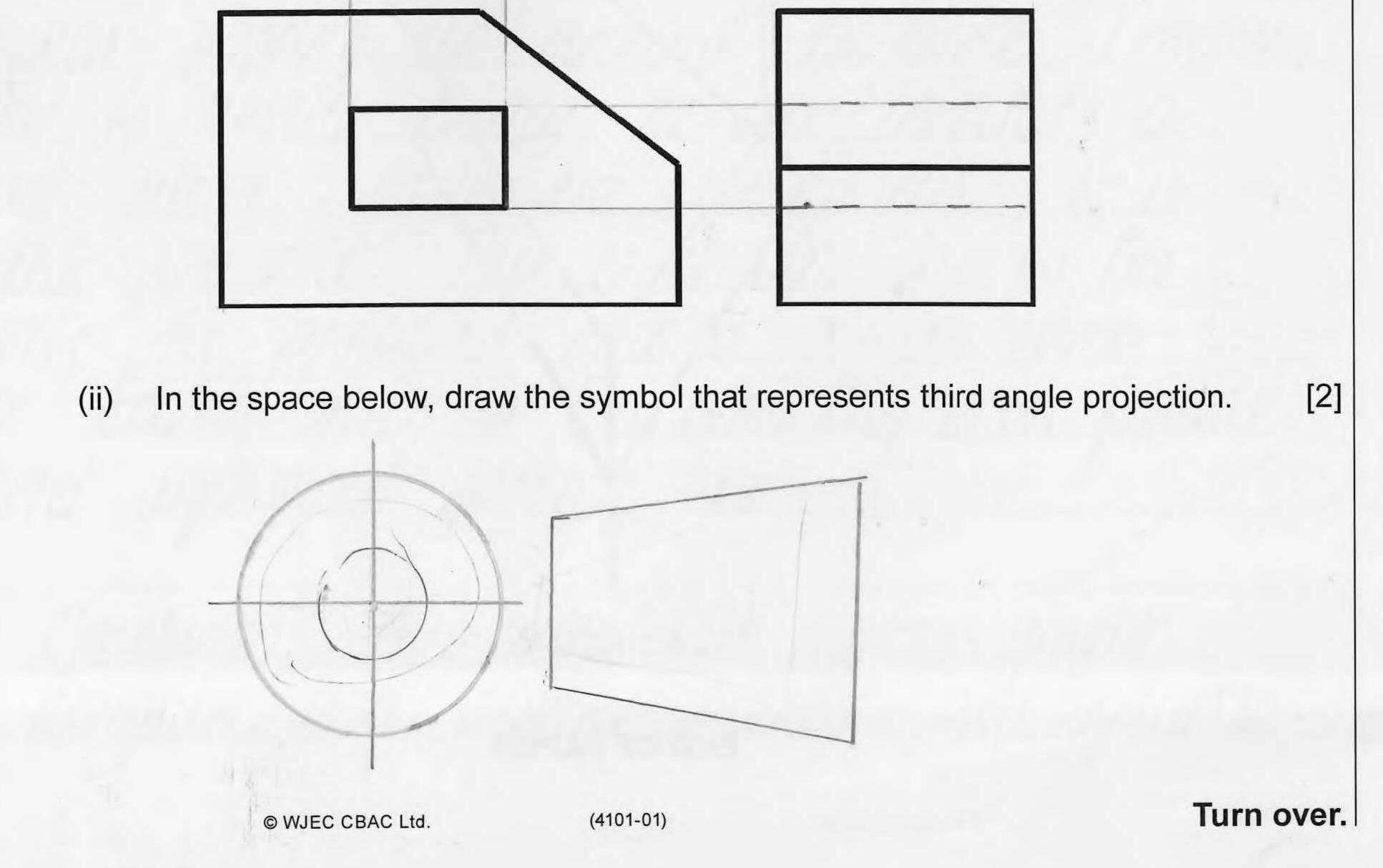
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19 Examiner only Explain what the term 'duplex' means when associated with printing documents. [2] (b) 1) / ///// ... .... Study the drawing below. (C)



(i) Add the hidden detail to the orthographic drawing below.

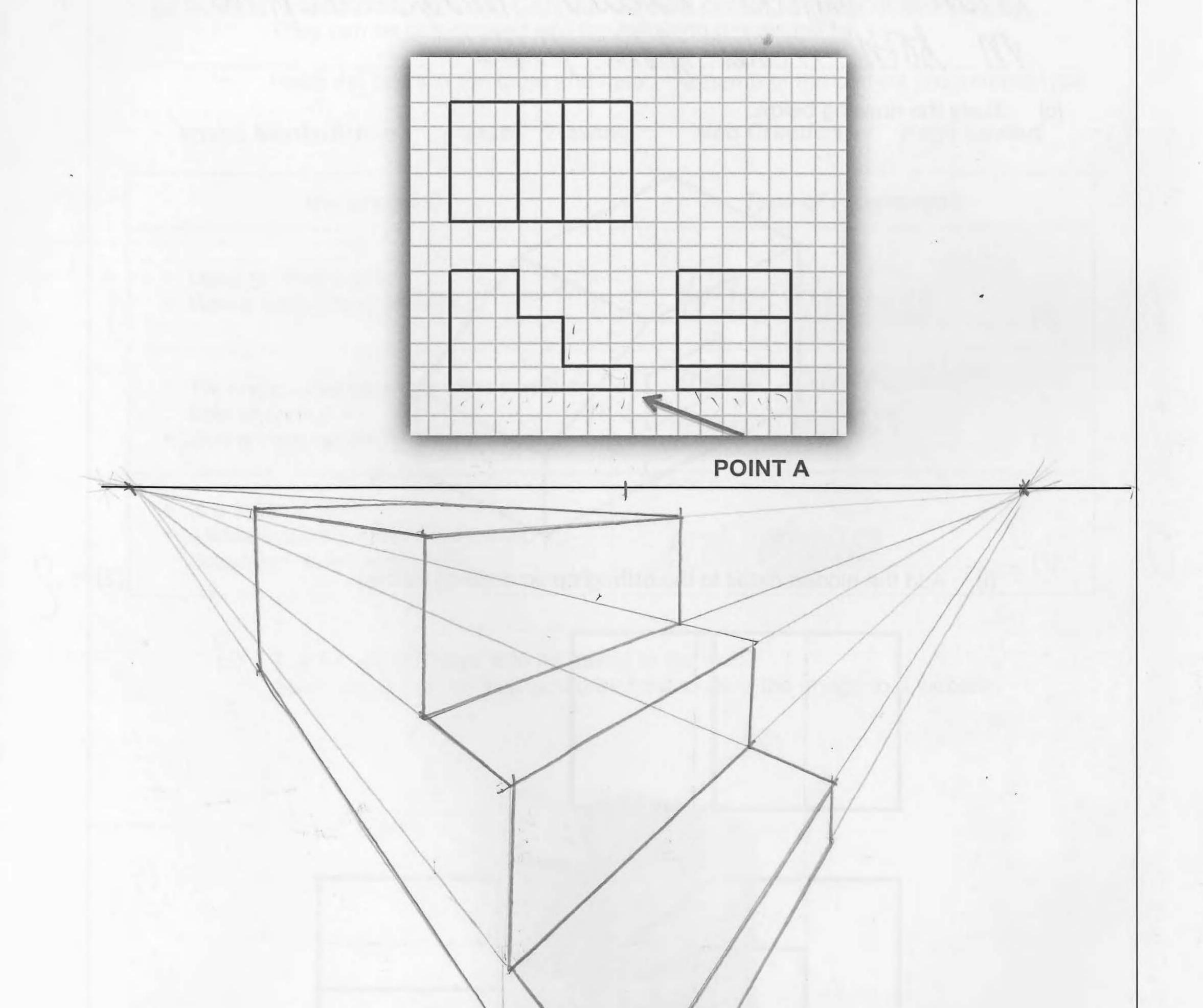




[2]

the second s

(d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you.
 (Leave all construction lines visible and estimate any sizes.)



## POINT A

#### **END OF PAPER**

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8. This question is about ICT, CAD, CAM, Systems and Processes. It is worth a total of 15 marks.

18

(a) (i) Graphic designers use CAD packages to design items for different tasks. They can be categorised into the following groups below.

Read the tasks in the table and insert the name of the correct programme type.

Examiner only

Image ManipulationVector DrawingWeb CreationPage LayoutDescriptionType of Programme

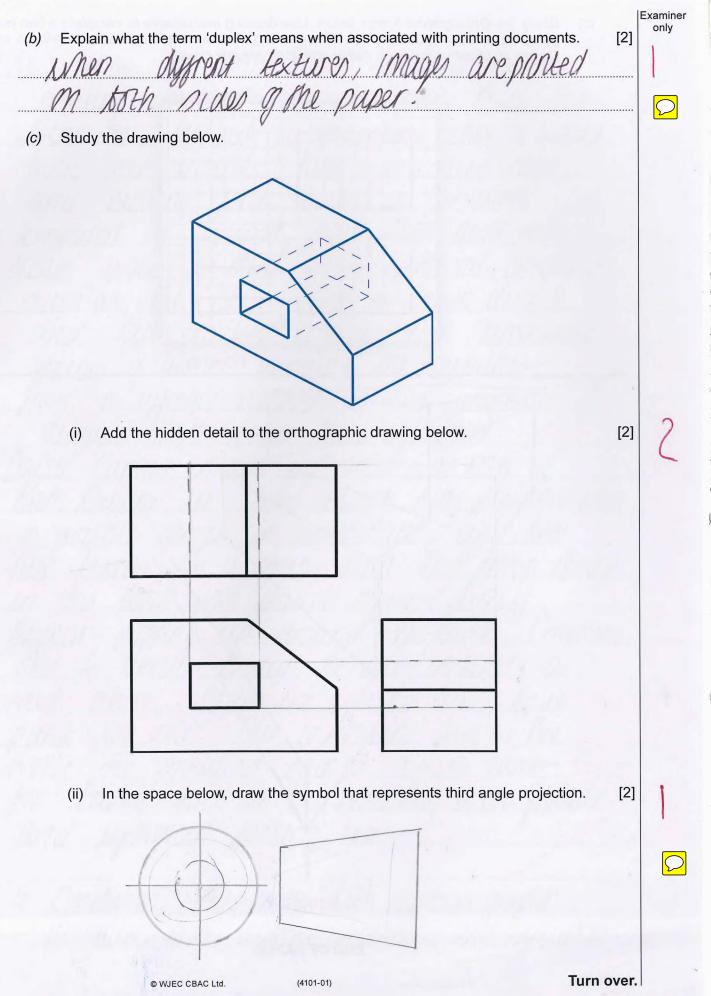
Decemption	
<ul><li>Used to draw logos.</li><li>Works better for typesetting.</li></ul>	Vector drawing [1]
<ul> <li>This type of programme uses pixels or dots of colour.</li> <li>Sometimes called raster packages.</li> </ul>	IMAGE MANIPULCITION NARE CREATEIN [1]
<ul> <li>Is a form of DTP.</li> <li>Allows multiple editors to develop a document at the same time.</li> </ul>	Web creation [1]

(ii) The following image is to be saved to the web.

State the file format that would be best to save the image to a website.



HTM Format ... ... [1]



- 20
- (d) Study the Orthographic image below. Use drawing instruments to complete a two point perspective drawing of the shape. The drawing has been started for you.
   (Leave all construction lines visible and estimate any sizes.)

