

FOR OFFICIAL USE

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**X207/101**



Total

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NATIONAL  
QUALIFICATIONS  
2008

MONDAY, 2 JUNE  
9.00 AM – 10.00 AM

COMPUTING  
STUDIES  
INTERMEDIATE 1

Fill in these boxes and read what is printed below.

Full name of centre

--

Town

--

Forename(s)

--

Surname

--

Date of birth

Day

Month

Year

--	--	--	--	--	--

Scottish candidate number

--	--	--	--	--	--	--	--	--

Number of seat

--

Attempt Section I and **one** Part of Section II.

Section I – Attempt all questions.

Section II – This section has two parts:

Part A – Computers and the Internet

Part B – Information and the Internet

Choose **one** part and answer **all** of the questions in that part.

Read all questions carefully.

Write your answers in the space provided on the question paper.

Write as neatly as possible.

Use blue or black ink. Pencil may be used for graphs and diagrams only.

Before leaving the examination room you must give this book to the invigilator. If you do not, you may lose all the marks for this paper.



## SECTION I

Attempt ALL questions in this section.

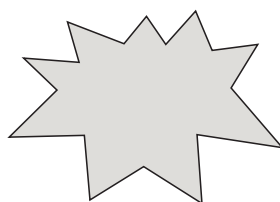
1. Gemma has used a graphics package to create the poster shown below for a charity night.



- (a) Gemma **edits** the text when the venue changes to Carlan Social Club.  
State which type of graphics package has been used to create this poster.

1  
0

- (b) Which of the graphic tools below has been used to create this object?



Tick **one** box.

☐

Rectangle

☐

Freehand

☐

Line

☐

Ellipse

1  
0

## 1. (continued)

- (c) Gemma would like to manipulate the picture in the poster as shown below.



Original



Manipulated

State which operation has been carried out on the picture to do this.

1  
0

- (d) Gemma uses a software package to work out the profit from the charity night.

	A	B	C	D
1	<b>Income</b>		<b>Expenses</b>	
2	Ticket Sales	1500	Advertising	150
3	Sponsorship	500	Disco Hire	300
4	Donations	98	Food & Drink	452
5			Hall Hire	112
6	<b>Total Income</b>	2098	<b>Total Expenses</b>	1014
7	<b>Profit/Loss</b>	1084		

Complete the table below giving **one** cell reference for each type of data.

The first one has been done for you.

Data	Cell Reference
Formula	D6
Value	
Text	

2  
1  
0

- (e) Gemma would like to format the cells so that the values appear with a pound sign (£).

State the formatting operation that Gemma should use to do this.

1  
0

- (f) The “Profit/Loss” in cell B7 is worked out by subtracting the “Total Expenses” away from the “Total Income”.

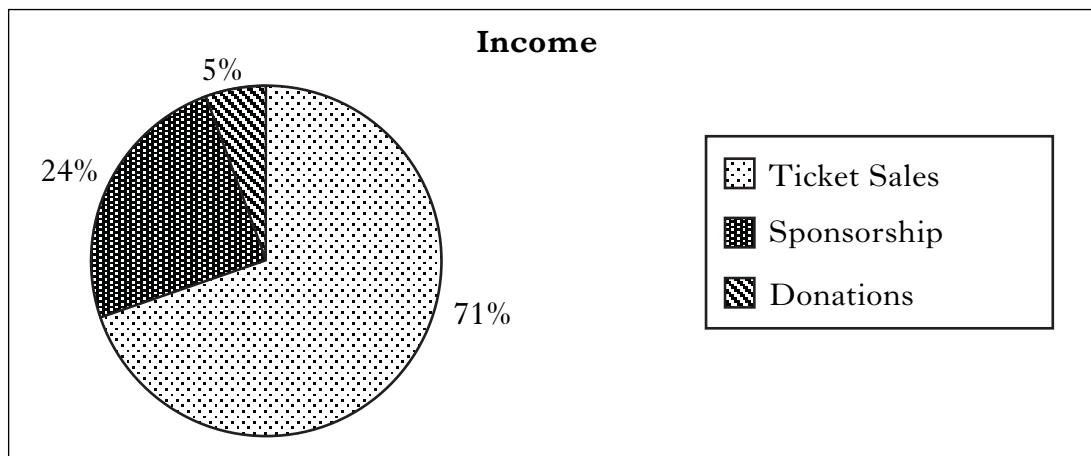
State a suitable formula for cell B7.

1  
0

[Turn over

**1. (continued)**

(g) Gemma produces a report including the diagram shown below.



Name the feature of the package that has been used to create this diagram.

1  
0

2. Navinder buys Storedata 2008.



- (a) He needs to learn about the basic features of the database package.

Name the feature of the software package that Navinder will use.

---

- (b) Fill in the blanks in the table below to complete the design for Navinder's database.

Field Name	Field Type	Sample Data
Name	Text	Adam
Surname	Text	Smith
	Text	24 Hynshaw Ave
Town	Text	Carlan
D.O.B		15 March 1992
Age	Calculated	16

- (c) Navinder would like a list of all customers who are under the age of 16 and live in the town of Carlan.

Describe how Navinder would use the database package to produce such a list.

---



---



---



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**[Turn over**

1  
0

2  
1  
0

3  
2  
1  
0

**2. (continued)**

- (d) Navinder decides he no longer needs to store data about his customers' ages. What should he do to change the database?

Tick **one** box.

- ☐ Delete a record
- ☐ Delete a field
- ☐ Amend a record
- ☐ Insert a field

1  
0

- (e) Here is part of a report created from Navinder's database. What has been done to the database to produce this printout?

First Name	Surname	Town	D.O.B.
Daniel	Cardow	Lemington	01 December 1993
Gillian	Grimshaw	Fenmuir	01 September 1992
Pamela	Little	Carlan	12 August 1992
Omar	Singh	Carburgh	29 January 1991
Adam	Smith	Carlan	15 March 1992

Tick **one** box.

- ☐ Create new database
- ☐ Edit database
- ☐ Sort database
- ☐ Delete record

1  
0

3. AirScot have a website which allows customers to book flights.

Customers can download a film about the facilities onboard the aircraft.

- (a) State the hardware device that would be the most suitable to capture the film.

1  
0

- (b) (i) State a file type which would be suitable for the downloaded film.

1  
0

- (ii) A customer downloads the file. Before it can be viewed the following message appears.

This file has been compressed.  
De-compress to continue?

De-compress

Cancel

Explain why compression has been used with this file.

1  
0

- (c) Which of the following hardware devices would a customer require in order to view the website at home?

Tick **one** box.

☐

Speakers

☐

Monitor

☐

DVD Drive

☐

Camera

1  
0

[Turn over

**3. (continued)**

- (d) Once a passenger has booked a flight with AirScot, a letter, as shown below, is sent to them to confirm the booking.

Mrs. F Russell 101 Blyth Street Anytown AN8 5TG 10 May 2008	<b>AIRSCOT LTD</b> 150 Main Street Glasgow G76 4XU
---	---

Dear Mrs Russell

We confirm your flight details with AirScot as follows. Flight AS 121 departs Glasgow at 12.15pm on the 8th June 08 and arrives in London at 1.30pm on the 8th June 08.

Thank you for booking with AirScot.

Yours faithfully,

J. Scott

Reservations Agent

- (i) State which type of text justification has been used in the paragraph shown below.

We confirm your flight details with AirScot as follows. Flight AS 121 departs Glasgow at 12.15pm on the 8th June 08 and arrives in London at 1.30pm on the 8th June 08.



3. (d) (continued)

- (ii) AirScot also realises that they have missed out the following paragraph from the letter.

“Please ensure that you check in for your flight at least 90 minutes before departure.”

Which editing facility should they use to ensure that this paragraph is included in the letter?

Tick **one** box.

☐ Amend

☐ Delete

☐ Insert

☐ Centre

1  
0

[Turn over

## 3. (d) (continued)

- (iii) The extra paragraph is included in the letter as shown below.

Mrs. F Russell 101 Blyth Street Anytown AN8 5TG 10 May 2008  Dear Mrs Russell  We confirm your flight details with AirScot as follows. Flight AS 121 departs Glasgow at 12.15pm on the 8th June 08 and arrives in London at 1.30pm on the 8th June 08.  Thank you for booking with AirScot.  Please ensure that you check in for your flight at least 90 minutes before departure.  Yours faithfully,  J. Scott  Reservations Agent	<b>AIRSCOT LTD</b> 150 Main Street Glasgow G76 4XU
---	---

The final paragraph of the letter should be “Thank you for booking with AirScot”.

State which feature would be used to move the paragraph without having to delete and re-type.

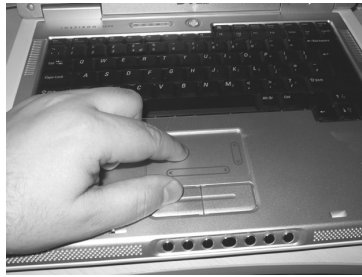
1  
0

- (iv) AirScot are still not happy with the appearance of the letter.  
Describe **one** way they could improve the appearance of the letter.

1  
0

4. Karen is buying a computer with which to create a website.

(a) Karen's computer has the input device shown below.



Which type of input device is Karen using?

Tick **one** box.

- ☐ Graphics Tablet
- ☐ Touchpad
- ☐ Mouse
- ☐ Keyboard

1  
0

(b) Apart from input devices, write down **two** hardware requirements Karen should consider.

1 \_\_\_\_\_

2  
1

2 \_\_\_\_\_

0

(c) State the type of application package that would be the **most** suitable for Karen to create the website.

\_\_\_\_\_

1  
0

[Turn over

**4. (continued)**

- (d) (i) Karen has not created a website before. She wants each page on her site to have the same layout.  
State the feature of the software package which will help her to create this.

---

**1  
0**

- (ii) Karen downloads the manual giving her instructions on how to create a website. She wants to print one page from this manual.  
She selects “Print” from the file menu and the following dialogue box appears.

PRINT	
Name: <input type="text" value="Printer1"/>	
Status: Idle	
<b>Print Range</b> <input checked="" type="radio"/> All <input type="radio"/> Current Page <input type="radio"/> Pages: <input type="text"/>	<b>Copies</b> Number of Copies: <input type="text" value="1"/>
<input type="button" value="Options"/>	<input type="button" value="OK"/> <input type="button" value="Cancel"/>

How can Karen ensure that the printer will only print the one page that she wants to look at and not the whole manual?

---

**1  
0**

## 4. (continued)

(e) A version of the home page from Karen's website is shown below.



- (i) Which text editing facility has been used to highlight the words “one stop” on the web page shown above?

Tick **one** box.

- ☐ Size
- ☐ Bold
- ☐ Underline
- ☐ Italics

1  
0

- (ii) Karen edits the website logo.



Original Logo



Edited Logo

Which graphic editing facility has been used to change the logo?

Tick **one** box.

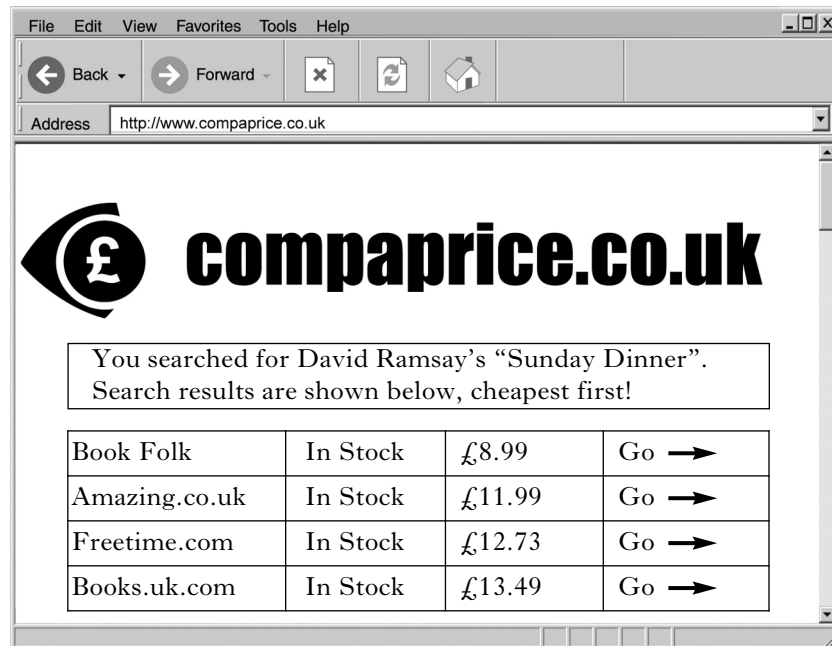
- ☐ Rotate
- ☐ Scale
- ☐ Colour
- ☐ Crop

1  
0

[Turn over

## 4. (continued)

(f) Karen tests her website.



One of her friends suggests it would be good to show a picture on the website.

- (i) Describe how Karen could use the software package to include a picture on the website.

---



---

2  
1  
0

- (ii) Karen wants to include spoken instructions which will play when a customer enters each part of the website.

Which of the following hardware devices would be the most suitable to record the instructions?

Tick **one** box.

- ☐ Speakers
- ☐ Microphone
- ☐ Keyboard
- ☐ Digital Camera

1  
0

**4. (continued)**

- (g) (i) Setco would like to advertise on Karen's website using an animated graphic.

State which hardware device will be needed to ensure that the animated graphic plays properly on the monitor.

1  
0

- (ii) Setco sends a file to Karen to include with their animated graphic. The filename is:

Setcobite.wav

What type of file has been sent to Karen?

1  
0

- (h) Karen continues to work on her website. It currently takes up 45 Mb of storage space.

- (i) Complete the following table showing the correct order of storage capacity.

Bit
Kilobyte
Megabyte
Terabyte

2  
1  
0

- (ii) While working on her website Karen is worried that a virus will destroy the data on her hard disk and that she will lose her work.

Which backing storage medium would be the most suitable for Karen to back up her website?

Tick **one** box.

- ☐ Floppy Disk
- ☐ CD-ROM
- ☐ USB Flash Drive
- ☐ DVD-ROM

1  
0  
(40)

[END OF SECTION I]

[Turn over

## SECTION II

There are two parts to this section.

Attempt **ONE** part only.

Tick the part that you intend to attempt.

Computers and the Internet

☐

Information and the Internet

☐



**Part A—Computers and the Internet**

5. Gramble Games Ltd produce a skiing game called “Black-run”.
- (a) When Black-run first loads, it shows several high quality, still images of each ski run, and an introduction read by a famous skier.

- (i) Which is the best input device to capture high quality still images?

Tick **one** box.

☐

Keyboard

☐

Digital Video Camera

☐

Digital Camera

☐

Microphone

1  
0

- (ii) State the output device required to listen to the skier’s introduction.

1  
0

- (b) The Black-run software is an application.  
What type of file is the user’s saved game?

	Type of File
Black-run Software	Application
Saved Game	

1  
0

- (c) Gramble Games sells Black-run on DVD-ROM.  
State **one** advantage of using a DVD-ROM instead of a CD-ROM.

1  
0

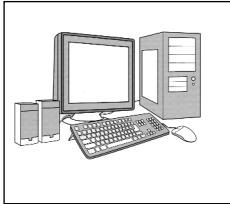
**[Turn over**

**Part A—Computers and the Internet (continued)****5. (continued)**

- (d) The Black-run game has the following minimum hardware requirements.

Processor	1GHz
Operating System	DacOS 2000 or later
Memory	580Mb available RAM required
Hard Disk	300Mb free space
Modem	

The computer system below was used to test the game, but the game did not run.

Computer Name	Coltarz 123	
Processor	1.5GHz	
Operating System	DacOS 2003	
Memory	512Mb RAM	
Hard Disk	24Gb free space	
Modem		

Why did the game not run?

Tick **one** box.

- ☐ The computer system does not have a modem
- ☐ The computer system does not have enough available memory
- ☐ The computer system does not have enough space on its hard disk
- ☐ The computer system does not have a fast enough processor.

- (e) Black-run contains high quality graphics and video. The game can be played against other people over the Internet.

State which type of Internet connection you would recommend users should have to play Black-run over the Internet.

---

**1  
0****1  
0**

**Part A—Computers and the Internet (continued)**

6. Navid sets up a *network* at home with his desktop, laptop and palmtop computer systems. He also installs a *server* on his network.

(a) Explain what is meant by a “computer network”.

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1  
0

(b) Explain the purpose of a “server” on a “network”.

---

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1  
0

(c) Filtering software is used when Navid accesses the Internet.  
Explain the task performed by filtering software.

---

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1  
0

(d) Navid cycles to work. He has to take a computer and an external backing storage device.

Which of these would fit most easily in his pocket?

Tick **one** box.

- ☐ Desktop computer and USB Flash drive
- ☐ Palmtop computer and CD-R drive
- ☐ Laptop computer and CD-R drive
- ☐ Palmtop computer and USB Flash drive

1  
0

(e) Both laptop and desktop computers have keyboards. State **one other** way to enter text into a palmtop computer.

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1  
0

**[Turn over**

**Part A—Computers and the Internet (continued)**

7. Ewan and Lee are creating a website to sell second hand teapots.
- (a) Ewan draws a sketch of how the website will look on his computer.

Leean's Teapots

User Name

Password

Sign In

Today's featured teapots

£45.00      £175.00      £27.50

This is the output of one stage of the Software Development Process.  
State which stage this is.

1  
0

- (b) The website must have restricted access.

Explain how Ewan has shown that the site will have restricted access.

1  
0

- (c) When a teapot is selected with the mouse, the user should be taken to a web page about that teapot.

State which web page feature should be added to each teapot graphic.

1  
0

**Part A—Computers and the Internet (continued)****7. (continued)**

- (d) Each teapot has a text description.

State which type of application is most suited to inputting and editing text.

1  
0

- (e) Ewan and Lee's website will have several *running costs*.

Identify an Internet "running cost" from the list below.

Tick **one** box.

☐

Buying a computer system

☐

Paying an ISP subscription

☐

Installing a modem

☐

Buying e-mail software

1  
0

- (f) Lee finishes the website and asks Ewan to test it in his browser.

- (i) State **one** item Ewan could test on the website.

1  
0

- (ii) What type of software is a browser?

1  
0

- (g) Ewan and Lee calculate their profit by typing the details of the teapots they buy and sell into a spreadsheet.

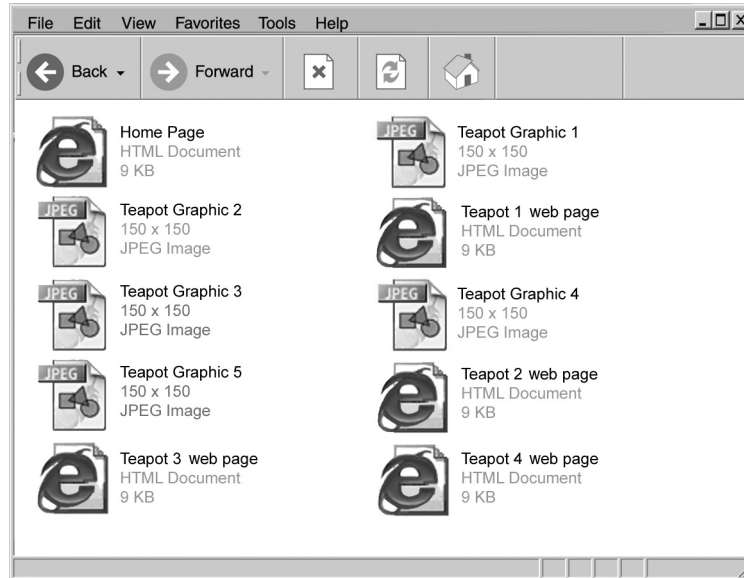
Explain why they use a spreadsheet for this task.

1  
0

[Turn over

**Part A—Computers and the Internet (continued)****7. (continued)**

(h) Lee has saved all the website files as shown.



Explain how Lee could use the operating system to organise these files.

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1  
0

*[END OF PART A—COMPUTERS AND THE INTERNET]*

**Part B—Information and the Internet**

5. Greg is a police officer. Each day he returns to the police station to update the criminal records database.

A record from the database is shown below.

Name	Jimmy Nasty
House Number	13
Street	Naewhere Road
Town	Dunkaldy
Telephone Number	08452135000
Offence	Driving without a licence
Date Arrested	7/01/2008
Time Arrested	5:05pm
Arresting Police Officer	Greg Dalry
Officer Number	1564
Police Region	Glasgow

- (a) Which record format is shown above?

Tick **one** box.

- ☐ Column layout
- ☐ Card layout
- ☐ List layout
- ☐ Record layout

1  
0

- (b) Fill in the table below using field names from the record shown above. The first one has been done for you.

Field Type	Field Name
Text	Street
Time	
Number	

1  
0

**[Turn over**

**Part B—Information and the Internet (continued)****5. (continued)**

- (c) Greg wants to change the order of the records putting the oldest criminal record first and the most recent record last.

How could Greg do this?

Tick **one** box.

- ☐ Search the Date Arrested Field in ascending order
- ☐ Search the Date Arrested Field in descending order
- ☐ Sort the Date Arrested Field in ascending order
- ☐ Sort the Date Arrested Field in descending order

1  
0

- (d) Which kind of information system is the police criminal records database?

Tick **one** box.

- ☐ Private and manual
- ☐ Private and electronic
- ☐ Public and manual
- ☐ Public and electronic

1  
0

- (e) The criminal records database stores data and is used to produce information.

Write *data* or *information* next to the examples below.

The first one has been done for you.

Greg's officer number - 1564	<b>Information</b>
Police Region - Glasgow	
Jimmy Nasty's house number - 13	
08112008	

2  
1  
0



**Part B—Information and the Internet (continued)**

6. Brakes Bikes are currently setting up an on-line shop on the World Wide Web. Companies doing business using the World Wide Web always have initial costs and running costs.

(a) State **two** running costs involved with maintaining an on-line shop.

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---

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2  
1  
0

- (b) Which of the following is an example of breaking the Data Protection Act?

Tick **one** box.

- ☐ Employees look up personal information about clients for their boss
- ☐ Employees print personal information about clients for their records
- ☐ Employees tell other employees about the clients' personal information
- ☐ Employees tell their friends at a party about clients' personal information

1  
0

- (c) Brakes Bikes will use their website to sell the bikes that are currently available in their shop.

State another feature of the Internet that Brakes Bikes would find useful.

---

---

1  
0

**[Turn over**

**Part B—Information and the Internet (continued)**

7. Brenda works for a Web authoring company called Fives. Fives have been asked to create a new e-commerce website for a sports clothing company.

- (a) When a customer buys clothes on the website they will enter their Name, Address and Credit Card details.

Explain why it is important that e-commerce websites are secure.

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1  
0

- (b) Companies recommend that each user's password contains both letters and numbers.

Which type of database field would the company use to store the passwords?

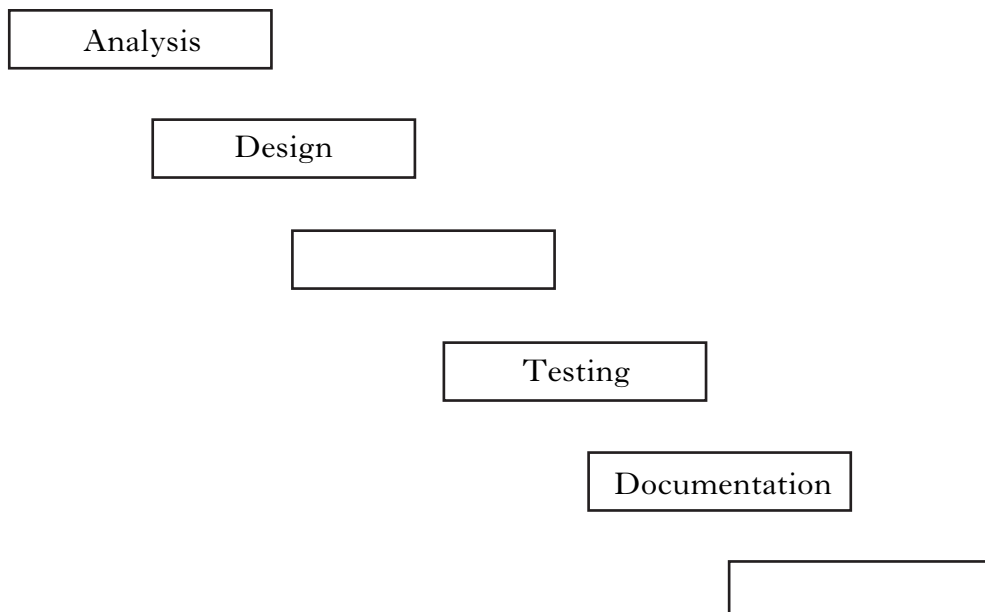
Tick **one** box.

- ☐ Text
- ☐ Number
- ☐ Calculated
- ☐ Time

1  
0

- (c) Brenda must follow the Software Development Process when developing the website.

Fill in the missing stages of the Software Development Process below.



2  
1  
0

**Part B—Information and the Internet (continued)****7. (continued)**

- (d) Brenda uses the Internet to look for ideas on other clothing websites.

Name the hardware device Brenda must have in order to connect her computer to the Internet.

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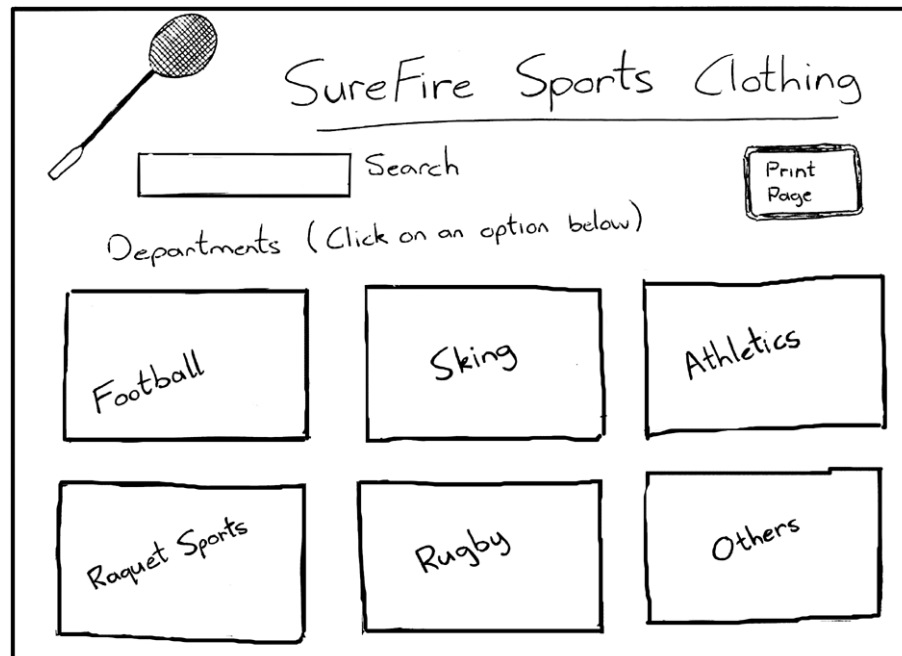
1  
0

- (e) Brenda's computer can download data from the Internet at 8Mb per second.  
State the type of Internet access Brenda is using.

---

1  
0

- (f) Brenda designs the website on paper. Her drawing is shown below.



On the diagram above, circle **one** example of a hyperlink.

1  
0

- (g) Brenda now creates the website and tests it.

Apart from hyperlinks, state **one** item from the design above that could be tested.

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1  
0

**[Turn over for Question 7(h) on Page twenty-eight]**

**Part B—Information and the Internet (continued)**

**7. (continued)**

(h) State the **two** guides that Brenda should write at the documentation stage.

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2  
1  
0

*[END OF PART B—INFORMATION AND THE INTERNET]*

*[END OF SECTION II]*

*[END OF QUESTION PAPER]*