



Presbyterian Ladies' College  
A College of the Uniting Church in Australia

Year 11 ATAR Course Examination, 2021  
Semester 1  
Question/Answer Booklet

## ANSWERS

# 11 MATERIALS DESIGN AND TECHNOLOGY

### Sections One and Two

Student No: in figures

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in words

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### Time recommended for these sections

Reading/planning time before commencing work: Ten minutes

Working time for these sections: Two and a half hours

### Materials required/recommended for this paper

#### *To be provided by the supervisor*

This Question/Answer Booklet

#### *To be provided by the candidate*

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener, correction fluid/tape, eraser, ruler, highlighters, scissors, glue sticks

Special items: non-programmable calculators approved for use in this examination

### Important note to candidates

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised material. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

## Structure of this paper

Section	Number of questions available	Number of questions to be answered	Suggested working time (minutes)	Marks available	Percentage of written examination	Your Mark
Section One Short answer	3	3	15	15	15	
Section Two Extended answer	3	3	30	25	25	
Section Three Textile specific content	4	4	105	80	60	
<b>Total</b>					100	

## Instructions to candidates

1. The rules for the conduct of ATAR course examinations are detailed in the *Year 11 Information Handbook 2021*. Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet.
3. Answer the questions according to the following instructions.  
  
Sections One and Two: Answer **all** questions.  
Section Three: Answer all of the questions within your specialised field: Textiles.
4. You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.
5. Additional working space pages at the end of this Question/Answer booklet are for planning or continuing an answer. If you use these pages, indicate at the original answer, the page number it is planned/continued on and write the question number being planned/continued on the additional working space page.

**Section One: Short Answer**

**15 marks**

This section has **THREE (3)** questions. Answer **all** questions. Write your answers in the spaces provided.

Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue with your answer.

- Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
- Continuing an answer: If you need to use the space to continue an answer, indicate in the original answer space where the answer is continued, i.e. give the page number. Fill in the number of questions that you are continuing to answer at the top of the page.

Suggested working time: 15 minutes

**Question 1**

**(4 marks)**

Select **ONE (1)** of the pieces of equipment from those shown below. Choose the item most relevant to your context area of study.



Iron



Ban Saw



MiG Welder

Identify **FOUR (4)** safety rules to follow when using the piece of equipment that you have selected.

Q1	Identify <b>FOUR (4)</b> safety rules to follow when using the piece of equipment that you have selected.
1 mark each	for 4 safety rules to follow when using an iron
total: 4 marks	

- Cord must be checked regularly to ensure that it is not twisted and knotted. This could result in the flex being broken and an electric shock
- Electrical safety- do not fill with water when the iron is turned on
- Keep the face of the iron well way from hand when working with it
- Do not leave the iron with its face down on he board as this could result in a fire
- Keep hands well away from the steam vent as steam burns are severe and extensive.

**Question 2**

**(7 marks)**

Look at the backpacks shown in the photographs below.

The backpacks are designed for two different types of people.



**Backpack A**



**Backpack B**

(a) Identify and explain the target market and intended use for each backpack. (4 marks)

Q2	Identify and explain the target market and intended use for each backpack.
1 mark each	for correctly identifying and explaining each target market
1 mark each	for correctly identifying and explaining the intended use of each backpack
total: 4 marks	

**Backpack A**

Target market: **for wealthy, up market, brand conscious people**

Intended use for Backpack A:

- **Everyday use at coffee venues, museum, art galleries for the person who wants to be noticed. Or for carrying around in public to hold a laptop and jacket.**
- **To look wealthy and upwardly mobile through carrying a status symbol with the Louis Vuitton logo being very obvious.**
- **Not for rainy days or hiking as the leather may be compromised**

**Backpack B**

Target market: middle income level. health-conscious hiker, outdoors person

Intended use for Backpack B:

- **For outdoor pursuits. Suitable for rainy days. Has lots of water proof pockets, well supported. Obvious colour which enables the hiker to be seen if they get into trouble**

(b) Fill in the table below to show **THREE (3)** comparisons of design features between the design of Backpack A and the design of Backpack B. One example has been completed for you. (3 marks)

<b>Backpack A</b>	<b>Backpack B</b>
<i>E.g., thin brown leather backpack shoulder straps - designed for short term use when shopping</i>	<i>E.g., wide strong comfortable backpack straps designed for comfort during long term use when hiking</i>
Minimal external pockets designed to hold phone, makeup, credit cards etc	Many external pockets designed to hold hiking gear. Rain hats, water bottles and other essential hiking equipment needed at a moment's notice.
Leather with louis Vuitton Logo- not suited to rainwear	Made in a waterproof nylon outdoor fabric designed to keep contents dry/
No waist strap- only shoulder straps. Designed to carry a light load.	Has a waist support strap to facilitate carrying a heavy load

**Question 3**

**(4 marks)**

Designers use Information Communication Technology (ICT) in a wide range of ways in manufacturing industries today.

Explain **TWO (2)** ways in which you could have used Information Communication Technology (ICT) to help you in creating and managing your designs in your portfolio and communicating your progress to a client if they were unable to get to your studio or workshop.

Q3	Explain <b>TWO</b> ways in which you could have used (ICT) to help you in creating and managing your designs in your portfolio and communicating your progress to a client if they were unable to get to your studio or workshop.
2 mark each	for correctly explaining how ICT can be used to create and manage designs in portfolio and to communicate your progress to a client
2 marks each	for correctly identifying and explaining the intended use of each backpack
total: 4 marks	

Example 1:

Rapid fire designs and designs in detail can be drawn and then sent to the computer via the scanning process. They can then be sent via email to the client for feedback. If they are too large the following option is better.

Example 2:

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Rapid fire designs and designs in detail can be drawn and then sent to the computer via the scanning process. The design can be uploaded to teams and a Teams meeting can be set up with the client to discuss where to go from this point or any point in the design process.

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**End of Section One**

## Section Two: Extended Answer

**25 marks**

This section has **THREE (3)** questions. Answer **all** questions. Write your answers in the spaces provided.

Spare pages are included at the end of this booklet. They can be used for planning your responses and/or as additional space if required to continue and answer.

- Planning: If you use the spare pages for planning, indicate this clearly at the top of the page.
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Suggested working time: 30 minutes

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### Question 4

**(12 marks)**

This question is about the design fundamentals.

For all parts of this question refer to the image of the contemporary Hans Wegner circle lounge chair shown below.

The circle lounge chair retails at \$2,095.00.



Question 4 continued

- (a) Identify and discuss how the designer has considered each of the design fundamentals listed below in the design and manufacture of this lounge chair. Discuss **TWO (2)** relevant points for each design fundamental. (10 marks)

Q4A	Identify and discuss how the designer has considered each of the design fundamentals listed below in the design and manufacture of this lounge chair. Discuss <b>TWO</b> relevant points for each design fundamental.
2 mark each for 5 fundamentals	for correctly identifying and explaining 2 ways how the designer has considered each of the design fundamentals in the design and manufacture of the lounge chair
total: 10 marks	

Design Fundamental	TWO (2) relevant points
Aesthetics	<ol style="list-style-type: none"> <li>1. Colour: a neutral colour scheme has been employed in the design. The mid brown of the wood has been contrasted with the black cushions to good effect.</li> <li>2. line: curved and diagonal lines have been contrasted in both the cushion and chair frame designs. The wicker back of the chair features thin diagonal lines with contrast with the wider diagonals of the chair back support and legs. These diagonal lines draw the eye inwards towards the seat section inviting you to sit in the seat.</li> <li>3. Shape: the circular shape of the back of the chair contrasts with the diagonal shapes created by the lines of the wicker chair back.</li> </ol>
Function	<ol style="list-style-type: none"> <li>1. the designer would need to have to consider comfort and in so doing this that the height of the chair from the floor would be at an appropriate height for comfortable sitting. (Ergonomics)</li> <li>2. The high back of the chair matches the height of the human back and will support the back whilst sitting. (Ergonomics)</li> <li>3. the designer would need to have to consider the need for soft cushions to provide comfort when sitting and leaning back. Ease of manufacture would also need to be considered here</li> </ol>
Economics	<ol style="list-style-type: none"> <li>1. the designer would need to have to consider that the chair is work of art. And will therefore retail at a high price as it is hand made by someone with skills that others do not have.</li> <li>2. the designer would need to have to consider that the overall cost of making the chair. In this case, the cost of the materials would not been high. The wicker cane and the linen for the cushions would not be expensive. The market for this chair would be niche and people desiring a work of art would be prepared to pay for it.</li> </ol>
Environment	<ol style="list-style-type: none"> <li>1. The designer clearly considered environmental sustainability when designing this chair. The wicker cane is a natural product and will biodegrade at the end of life</li> <li>2. The designer in looking for environmentally friendly alternatives would have considered that linen fibre would be a good choice as growing it requires little water and no pesticides. The cushions could also be made from cotton. If this was the case it would ideally be organic as it would not create environmental problems during growth and production. Hemp is another alternative.</li> </ol>

Social	<p>1. the designer would need to have to consider the socio economic group that would use the chair. It would be a higher socio economic group as it is an artistic piece with a high price point</p> <p>2. the designer would need to have to consider the social settings for the chair- to be used as a comfortable piece on a verandah or under a pergola.</p>
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- (b) Describe the **relationship that exists between aesthetics and function** when applied to the design of the Hans Wegner circle lounge chair. (2 marks)

Q4B	Describe the <b>relationship that exists between aesthetics and function</b> when applied to the design of the Hans Wegner circle lounge chair.
2 marks	For correctly describing the <b>relationship that exists between aesthetics and function</b> when applied to the design of the Hans Wegner circle lounge chair.
total: 2 marks	

Ergonomics is the aspect of function that needs to be considered when discussing the relationship between the function and aesthetics of the chair. When designing the chair the artist would have had to consider its end use with the intention of designing features that provide comfort and ease of movement as well as good appearance. Therefore the measurements of the human body would have been considered in conjunction with ergonomics to design a product that causes no harm. The materials used would also have been considered. Cane does not get hot- thus making the seat good for outdoor use. The linen or organic cotton can be washed easily not limiting the function of the chair.

**Question 5**

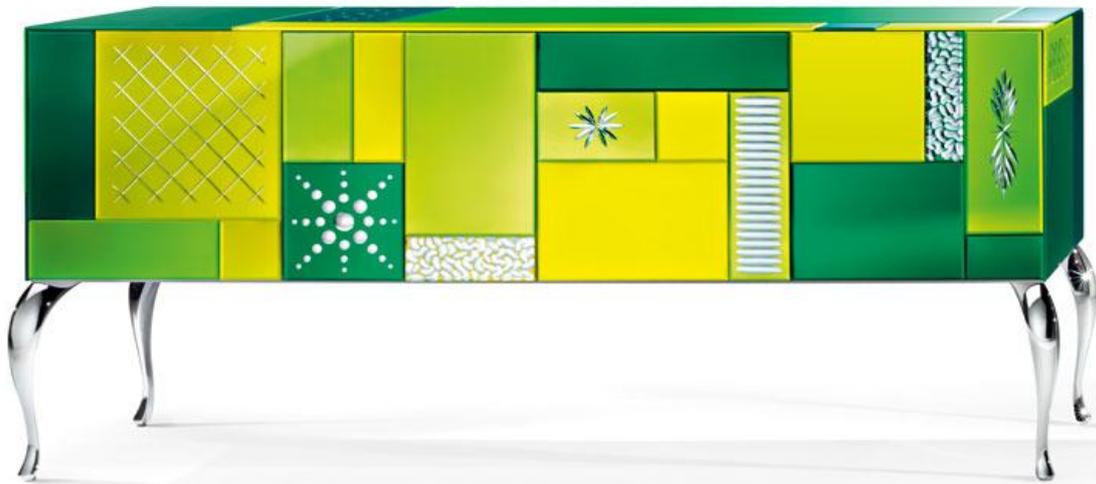
**(8 marks)**

Designers use the elements and principles of design to create a product with overall harmony and unity to suit the needs and wants of a client or a target audience.

Look at the product designed by Italian designer, Leo de Carlo in the image below. Analyse the product using the elements and principles of design.

Identify and discuss the use of **TWO (2)** elements of design and **TWO (2)** principles of design in your answer.

Q5	Identify and discuss the use of <b>TWO (2)</b> elements of design and <b>TWO (2)</b> principles of design in your answer.
2 marks for each element of design	For correctly identifying two elements of design and analysing how they have been used in the design
2 marks for each principle of design	For correctly identifying two principles of design and analysing how they have been used in the design
total: 8 marks	



'HOPE' contemporary green multicoloured luxury buffet handmade by Leo de Carlo of Venice, Italy.

**(4 marks)**

Element of Design 1:	Element of Design 2:
<p><b>Colour:</b></p> <ul style="list-style-type: none"> <li>• cool colours which are together on the colour wheel have been used in this design.</li> <li>• The colour scheme is analogous with yellow, green yellow and green being used.</li> <li>• Then tints and shades of these colours has been added to create depth and variety</li> <li>• White has been used as a neutral colour to create contrast</li> <li>• matt colours are contrasted with metallic silver which is used for the less and the patterned areas.</li> </ul>	<p><b>Shape</b></p> <p>Rectangular shapes of varying sizes have been used to create contrast and therefore interest in this design.</p> <p>these shapes contrast with the curved shapes of the legs</p> <p><b>texture:</b></p> <p>matt and shiny surfaces have been combined as have plain and patterned surfaces. This creates contrast and interest.</p>

Question 5 continued



'HOPE' contemporary green multicoloured luxury buffet handmade by Leo de Carlo of Venice, Italy.

(4 marks)

Principle of Design 1:	Principle of Design 2:
<p><b>contrast:</b> colour has been contrasted with vivid greens and yellows being mixed with metallic silver in the legs and patterned areas. Shape is contrasted with the straight lines on the body of the furniture contrasting with the curved legs.</p> <p><b>proportion:</b> unequal proportion of body and leg height creates interest.</p>	<p><b>balance;</b> asymmetric use of colour, shape and line are evident in the furniture creating a less formal, artistic effect.</p> <p><b>focal point</b> and radiation: these are synonymous in this design as the square featuring a radiated pattern is the focal point</p>

**Question 6**

**(5 marks)**

The Indian bridal jewellery piece shown in the image below, known as the ‘Meenakari choker’ has been designed and made using a range of precious metals and stones and also pink enamel. In designing this piece of jewellery, anthropometric data and ergonomics have been considered by the designer in order to create personalised fit and comfort for a bride to wear this piece all day.



Source: Vogue website

Q5	Identify and discuss the use of <b>TWO (2)</b> elements of design and <b>TWO (2)</b> principles of design in your answer.
1 mark	For correctly defining ergonomics
1 mark	For correctly defining anthropometrics
3 marks	For discussing how the inter-relationship between ergonomics and anthropometrics has been considered by the designer when designing the ‘Meenakari choker’. (3 marks for ergonomics, anthropometrics and function being discussed)
total: 5 marks	

(a) Define ergonomics

(1 mark)

**Ergonomics** can roughly be defined as the study of people in their working environment. More specifically, an ergonomist (designs or modifies the **work** to fit the worker, not the other way around. The goal is to eliminate discomfort and risk of injury due to **work** Ergonomics uses the measurements of the human body to design tools, clothing ,furniture, cars etc that cause no harm to the human body

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(b) Define anthropometrics

(1 mark)

**Anthropometrics** is the practice of taking measurements of the human body and provides categorised data that can be used by designers.

Question 6 continued

(c) Discuss how the inter-relationship between ergonomics and anthropometrics has been considered by the designer when designing the 'Meenakari choker'. (3 marks)

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The measurements of the human body (anthropometrics) have been used by the designer to create a choker necklace that fits the neckline of an average person so that the wearer is comfortable when wearing it and it sits correctly on the neckline. (ergonomics)

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The clasp at the back would be designed so that it is within easy reach of the human arm-span ensuring that it can be easily taken on and off. (anthropometrics and ergonomics) . this ensures the necklace functions properly for wear.

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**End of Section Two**

**Section Three: Textiles Specific Context****80 marks**

This section has **FOUR (4)** questions. Answer **all** questions. Write your answers in the spaces provided.

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Suggested working time: 110 minutes.

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**Question 7****(22 marks)**

This question is about product design and materials.

Look at the baby swaddle sleep suit in the picture below.

The fabric is a medium stretch knit fabric and the fibre content is 93% cotton and 7% elastane.



See next page

Question 7 continued

Q7 A	The fabric is a medium stretch knit fabric and the fibre content is 93% cotton and 7% elastane. List <b>FOUR (4)</b> advantages of this fibre blend for this baby swaddle.
1 mark for each advantage of the fibre blend	For correctly identifying two elements of design and analysing how they have been used in the design
2 marks for each principle of design	For correctly identifying two principles of design and analysing how they have been used in the design
total: 4 marks	

(a) List **FOUR (4)** advantages of this fibre blend for this baby swaddle. (4 marks)

Advantage 1:

The cotton percentage is greater than the elastane so the fabric will be absorbent and will hold a lot of moisture which will evaporate away from the wearer.

Advantage 2:

The cotton percentage is greater than the elastane meaning that the fabric will have good abrasion resistance and withstand a lot of washing before it wears out.

Advantage 3:

The cotton percentage is greater than the elastane meaning that the fabric will have a high strength and will withstand a lot of pressure before breaking

Advantage 4:

The cotton percentage is greater than the elastane and this will ensure that the fabric is comfortable, soft and non-irritating against the skin

Advantage 5:

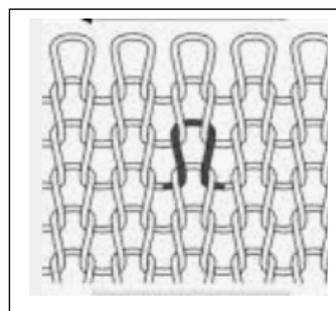
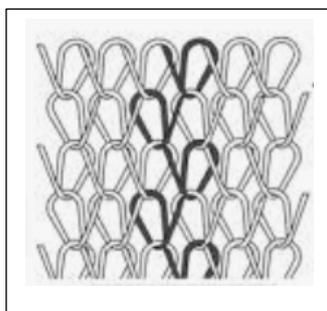
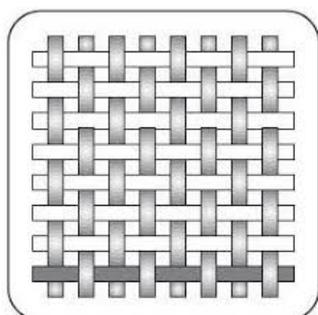
The percentage of elastane will provide elasticity enabling the baby to move around comfortably

Advantage 5-

The percentage of elastane will provide elasticity providing a snug fit and will reduce the presence of air pockets thereby reducing its fire danger.

(b) **The baby swaddle is made using a weft knit structure.**

**Circle the box to show the correct stretch fabric structure for this swaddle. (1 mark)**



Question 7 continued

Q7B&C	The baby swaddle is made using a weft knit structure. Give <b>TWO</b> reasons why this is a suitable method of fabric construction for the baby swaddle.
1 mark	For correctly identifying the knit structure as a weft knit
2 marks	For giving 2 reasons ( one mark per reason) why the weft structure is a suitable method of fabric construction for the baby swaddle.
total: 3 marks	

**(c) Give TWO (2) reasons why this is a suitable method of fabric construction for the baby swaddle. (2 marks)**

REASON 1;

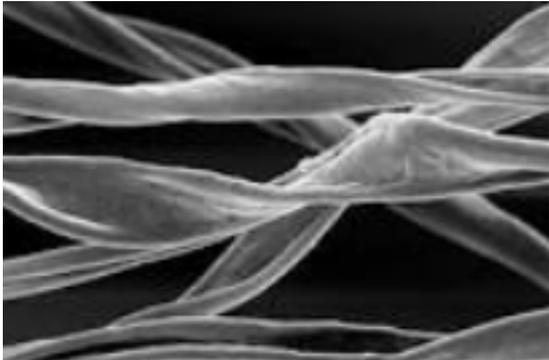
The percentage of elastane will provide elasticity enabling the baby to move around comfortably

REASON 2:

The percentage of elastane will provide elasticity providing a snug fit and will reduce the presence of air pockets thereby reducing its fire danger.

**(d) In the space provided below draw and describe the longitudinal microscopic view of the cotton fibre: (1 mark)**

QD	<b>draw and describe the longitudinal microscopic view of the cotton fibre:</b>
1 mark	For drawing the convolutions that are twists along the length of the ribbon like fibre
total: 1 mark	



Annotate convolutions- these are twists along the length of the ribbonlike fibre

**Longitudinal view of the cotton fibre**

Question 7 continued

Q7 E	Name and explain this characteristic / property.
1 mark	For the correct name of the property
1 mark	for the <b>explanation of this unique characteristic /property:</b>
total: 2 marks	

- (e) The longitudinal view of the cotton fibre provides evidence of a unique characteristic or property of this fibre. Name and explain this characteristic / property. (2 marks)

Name of unique characteristic / property: **ABSORBENCY**

**Explanation of this unique characteristic /property:**

**THE CONVOLUTIONS TRAP WATER MAKING THE FIBRE ABSORBENT WHEN IT WOULD OTHERWISE BE EXPECTED TO NOT BE ABSORBENT,**

- (f) The child’s knitted jumper shown in the image below is designed to be worn in very cold weather. Using your knowledge of fibres suggest the best fibre to use for this garment. Give **TWO (2)** reasons for your choice of fibre. (3 marks)



Name of fibre: **WOOL**

Reason 1:

Wool is a poor heat conductor meaning it is an insulator and will keep the heat produced by the body close to the body ensuring the wearer remains warm.

Question 7 (f) continued

Reason 2:

Wool is very resilient ensuring the garment will not wrinkle

Q7 F	Name and explain this characteristic / property.
1 mark	For the correct name of the fibre
1 mark	for each of 2 reasons why this fibre is suitable for the jumper
total: 3marks	

(g) In the space provided draw and describe the longitudinal microscopic view of this fibre. (1 mark)

QG	<b>draw and describe the longitudinal microscopic view of the cotton fibre:</b>
1 mark	For drawing the scales that are twists along the length of the wool fibre
total: 1 mark	

Longitudinal view of the fibre used in the jumper

**Wool has scales along its longitudinal surface.**



(h) This fibre has a special unique characteristic or property which is evidenced by this microscopic view.

Name this characteristic / property: **FELTING** (1 mark)

(i) Explain how this unique characteristic / property can be used to create a fabric. (2 marks)

If a matrix of wool fibres are exposed to heat, water, detergent and friction the scales will interlock with each other forming physical bonds and will cause shrinkage and will felt, producing felt.

Q7 I	Name and explain this characteristic / property.
1 mark	For the correct name of the property
2 mark	for explaining how this unique characteristic / property can be used to create a fabric
total: 3marks	

- (j) For the knitted child's jumper made using this fibre, describe the special care that must be taken at each stage of the laundering cycle using the chart below to record your answer. (5 marks)

Q7 J	For the knitted child's wool jumper describe the special care that must be taken at each stage of the laundering cycle
1 mark	For the correct description of the care that must be taken at each stage
total: 5 marks	

Wash Stage	The care that must be taken when laundering this fibre
Detergent type	<b>A special gentle wool wash detergent is required. For example softly which contains natural soap and no harmful bleaches. This will ensure the protein in the wool is not denatured.</b>
Wash action	<b>A gentle kneading and squeezing action is required to agitate the water and remove the dirt. This is to prevent the scales interlocking and felting</b>
Water temperature	<b>A luke warm or tepid water temperature is required. This will prevent the protein in the wool denaturing and going hard and felting</b>
Drying	<b>The excess water needs to be gently squeezed from the jumper. Then it needs to be rolled flat in a towel and the more of excess water removed. Finally the garment can be dried flat or on a line with stockings through the arms.</b>
Ironing	<b>Iron with the temperature set to wool. Steam can be used. A protective damp cloth needs to be used over the garment when ironing to prevent the surface of the wool denaturing. .</b>

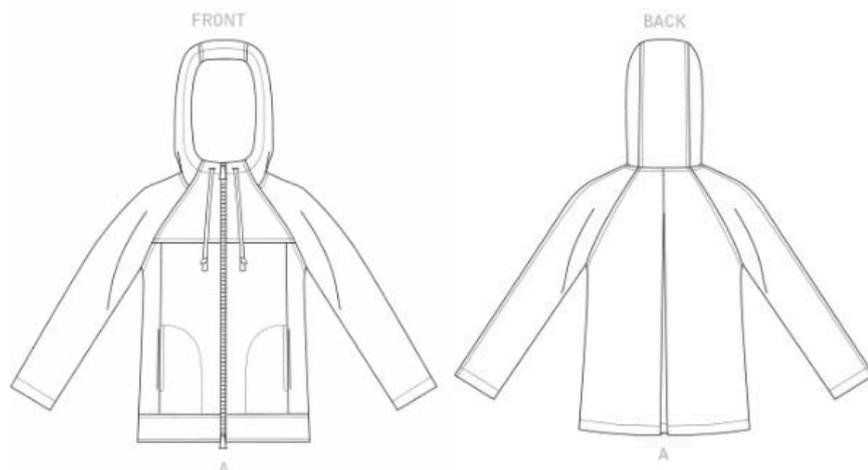
**Question 8**

**(22 marks)**

This question is about working drawings, fabric colouring and decorative techniques.

**Look at the jacket in the working drawings below.**

- (a) Annotate the working drawings using technical terms describing as many features as possible. (5 marks)



Q8 A	Annotate the working drawings using technical terms describing as many features as possible.
0.5 marks each	For 10 appropriate annotations
total: 10 marks	

- Back**
- Two piece sleeve with seam in line with shoulder seams
  - Back features an inverted pleat on CB from about 10 cm below the neckline to the hem.
  - Back features a hem at the base

- Front**
- Hip length loose fitting hoodie with
  - Raglan sleeves
  - Front yoke
  - Centre front: 2 way zip
  - ties through hood opening- with eyelets in the casing
  - cords are knotted at the ends
  - front features side and front panels with in seam pockets at hip
  - bottom band

Question 8 continued

- (b) A client has requested that you decorate this jacket using a variety of decorative techniques.

In the space below, provide a 3D rendered drawing of the decorated version of the jacket.

**Provide front and back views.** (4 marks)

Annotate:

- Materials to use for the decorated version of the jacket (2 marks)
- Suitable decorative components for the jacket (2 marks)

Q8 b	In the space below, provide a 3D rendered drawing of the decorated version of the jacket.
4 marks	<ul style="list-style-type: none"> <li>• For providing a front and back view using template supplied</li> <li>• with decorative technique</li> <li>• coloured</li> <li>• rendered</li> </ul>
2 marks	for annotating the appropriate materials to use for the decorated version <b>FIBRE AND FABRIC</b>
2 marks	for annotating suitable decorative components for the jacket
total: 8 marks	

- You could applique, digitally print, embroider, bead etc; a design on the back or a logo on the front of the hoodie.
- 3 D rendered\front and back
- Annotate materials: poly cotton fuzz buster fleece

- (c) In the space provided below, use notes and diagrams to explain **ONE (1) decorative technique** that could be used to add colour, texture and interest to different parts of the jacket. (7 marks)

Marks will be awarded for the following:

- a. Name of the technique
- b. Equipment and machine settings
- c. Step by step method/ instructions
- d. Quality of annotations and sketches to support your instructions

Q8 C	In the space provided below, use notes and diagrams to explain <b>ONE decorative technique</b> that could be used to add colour, texture and interest to different parts of the jacket.
1 marks	for correctly identifying a technique by name ( ensuring it is suitable for different <b>parts</b> of the jacket)
1 marks	for equipment list & machine settings
3 marks	for step by step instructions
2 marks	for sketches with annotations to support written instructions
total: 7 marks	

Technique Name: \_\_\_\_\_ (1 mark)

Equipment list & machine settings: \_\_\_\_\_ (1 mark)

Step by Step Instructions (3 marks)	Sketches with annotations to support written instructions (2 marks)
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(d) Describe **TWO (2)** problems that can occur when using digital printing to print on textiles. (2 marks)

Q8 D	Describe <b>TWO (2)</b> problems that can occur when using digital printing to print on textiles.
1 marks for each	Of 2 problems that can occur when using digital printing to print on textiles.
total: 2 marks	

Problems of using **digital printing**:

- **Using a medium appropriate to a laser or ink jet printer**
- **Remembering to flip the image horizontally if required to avoid images being mirror imaged**
- **Use the correct fibre type for the digital print medium**
- **Press for the required time**
- **Use the correct temperature iron**
- **Use baking paper to protect medium and fabric**

**Question 9**

**(21 marks)**

This question is about **Simplicity Pattern 8604: details shown below**

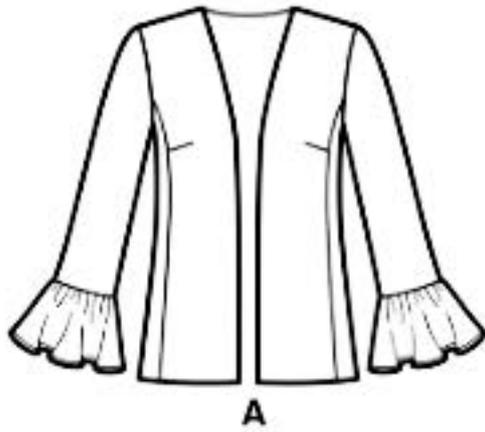
The questions will commence on **page 27** for **Question 9**.

**Front of the Pattern Envelope for Simplicity 8604**



Question 9 continued

**Simplicity 8604 – Working Drawings**



Question 9 continued

MISSES' / MISS PETITE LINED JACKETS... SEPARATE PATTERN PIECES INCLUDED FOR B, C, D, DD CUP SIZES										
Fabrics: Bouclé, Brocade, Corduroy, Crepe, Damask, Denim, Linen Types, Ponte, Seersucker, Tweed. Extra fabric needed to match plaids, stripes or one-way design fabrics.										
Notions: Thread, one 3" x 10" polyester fleece remnant for sleeve heading. C: Four 1/2" buttons. D: Six 1/2" buttons. Look for Simplicity Trims.										
BODY MEASUREMENTS (For Sizing Help Visit <a href="http://www.simplicity.com/sizinghelp">www.simplicity.com/sizinghelp</a> )										
Bust	30%	31%	32%	34	36	38	40	42	44	46
Waist	23	24	25	26%	28	30	32	34	37	39
Hip-8" below waist	32%	33%	34%	36	38	40	42	44	46	48
Back-neck to waist	15%	15%	16	16%	16%	16%	17	17%	17%	17%
Sizes	6	8	10	12	14	16	18	20	22	24
European	32	34	36	38	40	42	44	46	48	50
A Jacket	1%	1%	1%	2%	2%	2%	2%	2%	2%	2%
45***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
60***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Interfacing- 1 1/2 yd. of 20" to 25" lightweight fusible, such as Pellon®										
A,B Lining	1%	1%	1%	1%	1%	1%	1%	1%	2	2
45***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
60***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Interfacing- 2 1/2 yd. of 20" to 25" lightweight fusible, such as Pellon®										
C Jacket	1%	2	2	2%	2%	2%	2%	2%	2%	2%
45***	1%	1%	1%	1%	1%	1%	1%	1%	2	2
60***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
C,D Lining	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
45***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
60***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Interfacing- 1 1/2 yd. of 20" to 25" lightweight fusible, such as Pellon®										
D Jacket	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
45***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
60***	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Trim- 2 1/2 yd. of 3" wide fringe trim										
FINISHED GARMENT MEASUREMENTS (Includes Design and Wearing Ease) All Views Bust:										
B Cup	33%	34%	35%	37	39	41	43	45	47	49
C Cup	34	35	36	37%	39%	41%	43%	45%	47%	49%
D Cup	34%	35%	36%	38	40	42	44	46	48	50
DD Cup	35	36	37	38%	40%	42%	44%	46%	48%	50%
Finished back length from base of neck										
A,B	24%	24%	25	25%	25%	26	26%	26%	26%	26%
C	20%	20%	21	21%	21%	22	22%	22%	22%	22%
D	18%	18%	19	19%	19%	20	20%	20%	20%	20%

JEUNE FEMME/PETITE JEUNE FEMME: VESTES DOUBLÉES... Y COMPRIS PIÈCES DE PATRON SÉPARÉES POUR LES BONNETS B, C, D, DD										
Tissus: Laine Bouclée, Brocart, Velours Côtelé, Crêpe, Damas, Denim, Telle de Lin, Jersey Ponte, Seersucker, Tweed. Prévoyez davantage de tissu pour raccorder les épaissais, les rayures ou les motifs unidirectionnels.										
Mercerie: Fil, un morceau de melleton de polyester de 7.5cm x 25.5cm pour le coussinet de manche. C: Quatre boutons de 2cm. D: Six boutons de 2cm. Demandez les garnitures de Simplicity.										
MESURES NORMALISÉES										
Poitrine	78	80	83	87	92	97	102	107	112	117
Taille	58	61	64	67	71	76	81	87	94	99
Hanches (23cm au-dessous de la taille)	83	85	88	92	97	102	107	112	117	122
Dos (encolure à taille)	39.5	40	40.5	41.5	42	42.5	43	44	44	44.5
Tailles	6	8	10	12	14	16	18	20	22	24
Françaises	34	36	38	40	42	44	46	48	50	52
A Vest	1.60	1.60	1.60	2.00	2.00	2.00	2.20	2.20	2.20	2.30
115cm**	1.30	1.30	1.30	1.40	1.40	1.60	1.60	1.70	1.70	1.70
150cm**	Entoilage- 1.70m de 51cm à 64cm, léger, thermocollant tel que Pellon®									
A,B Doubleure	1.20	1.20	1.20	1.30	1.30	1.60	1.70	1.80	1.80	1.80
115cm*	B Vest									
115cm**	1.60	1.60	1.60	2.00	2.00	2.00	2.00	2.00	2.00	2.00
150cm**	1.30	1.30	1.30	1.50	1.50	1.50	1.60	1.60	1.60	1.60
Entoilage- 2.00m de 51cm à 64cm, léger, thermocollant tel que Pellon®										
C Vest	1.70	1.80	1.80	2.00	2.00	2.30	2.30	2.40	2.40	2.40
115cm**	1.50	1.50	1.60	1.60	1.60	1.70	1.70	1.80	1.90	1.90
150cm**	C,D Doubleure									
115cm*	1.10	1.10	1.10	1.20	1.20	1.20	1.40	1.40	1.40	1.50
Entoilage- 1.40m de 51cm à 64cm, léger, thermocollant tel que Pellon®										
D Vest	1.30	1.30	1.30	1.40	1.60	1.70	1.70	1.70	1.70	1.70
115cm**	1.20	1.20	1.20	1.20	1.20	1.30	1.30	1.30	1.30	1.30
150cm**	Garniture- 2.50m de garniture de frange de 7.5cm									
MESURES DES VÊTEMENTS FINIS										
Poitrine Toutes les Vues:										
B Bonnet	85	87.5	90	94	99	104	110	115	120	125
C Bonnet	86.5	89	91.5	95	100.5	106	111	116	121	126
D Bonnet	87	90	92.5	96.5	102	107	112	117	122	127
DD Bonnet	89	91.5	94	98	103	108	113	117	123	128
Longueur finie du dos depuis la base du cou:										
A,B	62	63	63.5	64	65	65.5	66	66.5	67.5	68
C	52	52.5	53.5	54	54.5	55	56	56.5	57	58
D	47	47.5	48.5	49	49.5	50	51	51.5	52	52.5

Question 9 continued

Q9 A	Annotate this working drawing for Jacket View C (below) describing as many features as possible:
0.5 marks each	For 8 appropriate annotations
4 marks	

(a) Annotate this working drawing for Jacket View C (below) describing as many features as possible: (4 marks)

- Waisted jacket featuring
- Crew neckline
- Princess front shaping
- Bust dart in princess seam
- Button through front with 4 buttons & buttonholes between neckline and waist
- Shoulder seams with set in sleeves
- Bell shaped sleeves at cuff
- Flared peplum below waist to high hip
- Lined
- Interfaced facings on neck and button closure



(b) Suggest a suitable fabric for the jacket pattern **Simplicity 8604** View C and give **TWO (2)** reasons for your choice. (2 marks)

Q9 B	Suggest a suitable fabric for the jacket pattern <b>Simplicity 8604</b> View C and give <b>TWO (2)</b> reasons for your choice
2 marks	The suitable fabric should come from the list on the back of the pattern envelop. 1 mark each giving 2 reasons why your suggested fabric is a good choice.
2 marks	

(c) **Fabric choice: boucle, brocade, corduroy, crepe, damask, denim, linen types, ponte, seersucker, tweed**

- Good drape so the peplum sits properly and flares as in the drawing
- Stable fabric to take the buttons and buttonholes and to support peplum
- Texture- interesting texture in the case of boucle, brocade, linen, damask

Question 9 continued

- (d) Is the peplum of Jacket C cut on the bias or the straight grain to achieve this style of peplum? Circle the correct answer. (1 mark)

Straight Grain

**Bias Cut**

- (e) Give a reason for your answer in part (d) of this question.

Q9 D&E	Is the peplum of Jacket C cut on the bias or the straight grain to achieve this style of peplum? Give a reason for your answer in part (d) of this question
1 marks	For an appropriate reason for your choice of grainline.
4 marks	

**Reason:**

The peplum is flared with no fullness at the waist and much wider base area. The folds fall evenly along the peplum which means the fabric is cut on the bias. If it was cut on the straight grain the fullness would form on the sides of the peplum.

- (f) Using 115cms wide fabric, how much fabric would you need to purchase to make:

Jacket View A in a size 10: **1.6metres** (1 mark)

Jacket View C in a size 14: **2 metres** (1 mark)

Q9 F	Amounts of fabric required
1 mark	For fabric amounts for each of jacket view A and C
2 marks	

- (g) Lining is listed as an additional fabric requirement for View C of Simplicity pattern 8604.

Using 115cms wide fabric, how much lining fabric would you need to purchase for View C in a size 10? (1 mark)

Amount of lining required: **1.1 metres**

Q9 G	Amounts of fabric required
1 mark	For fabric amounts for lining of jacket view A
1 mark	

- (h) Where and why would lining be used in construction of this jacket? (2 marks)

Q9 H	Where and why would lining be used in construction of this jacket
1 mark	For where lining is used
	For why lining is used
2 marks	

Question 9 continued

**Where?** used in the body and sleeves of the jacket

**Why?-**

- to give body to the garment
- to hide the seams and facings
- to facilitate easy dressing as the lining helps the jacket slip onto the wearer.

(i) Interfacing is listed as an additional fabric requirement. Where would interfacing be required in the construction of Jacket View C? (2 marks)

Q9 I	Where would interfacing be used in construction of jacket C
1 mark	For each of 2 areas where the interfacing is used
2 marks	

**Interfacing is used in the following areas:**

- the front and back neckline extended into
- the centre fronts to support the buttonholes and the buttons.

(j) How much interfacing is required in the construction of Jacket View C? (2 marks)

Q9 J	How much interfacing is required in the construction of Jacket View C
1 mark	For width
1 mark	For length
2 marks	

Interfacing width:**56-64 cms wide**  
 Interfacing length:**1.4 metres long**

(k) Notions are required for Jacket View C. List the notions required to make this jacket. (2 marks)

Q9 K	Notions are required for Jacket View C. List the notions required to make this jacket
2 marks	For a complete list of notions
1 mark	For 2 items on the list
2 marks	

**List of notions:**

- **7.5 cms x 24.5 cm piece of fleece for sleeve heads**
- **Thread:**
- **Buttons: 4 x2cms buttons**

(l) Jacket View C requires a finish for the bottom of the peplum. Using diagrams and text describe the steps for a suitable finish for this bottom edge of the peplum. (3 marks)

Q9 I	Notions are required for Jacket View C. List the notions required to make this jacket
1 mark	For the suitable finish
1 mark	For the text description of how to construct the finish
1 mark	For the diagrammatic description of how to construct the finish
3 marks	

**Finish:** For the semi-circular hem a single hem is advisable and hand stitched invisibly with French hemming stitch or hem stitch or herringbone stitch. Could also be blind hemmed on the sewing machine.

**Text:**

- finish hem edge with overlocking
- sew a gathering stitch 6mm for the edge- stitch length 4
- turn up 1.5- 2 cms in width
- pull the bobbin thread to shrink the hem
- pin in place and steam press
- finish with hand French hemming / hem stitch or a machine blind hem

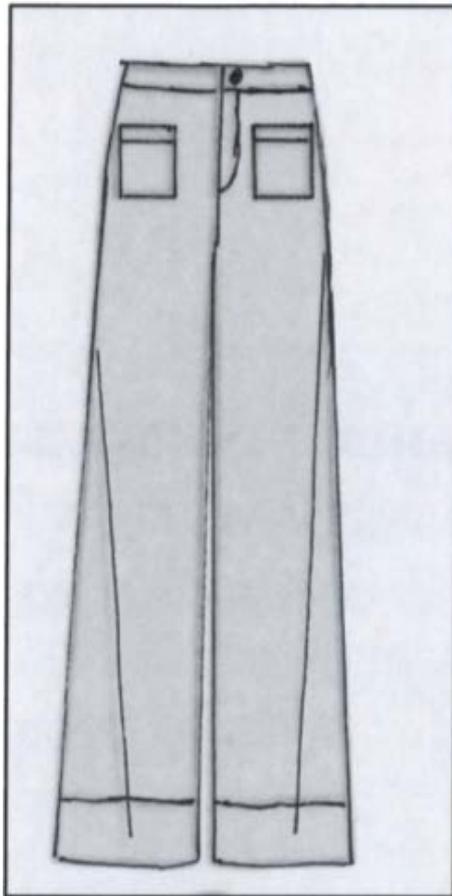
**Diagrams:**

To support this

**Question 10**

**(15 marks)**

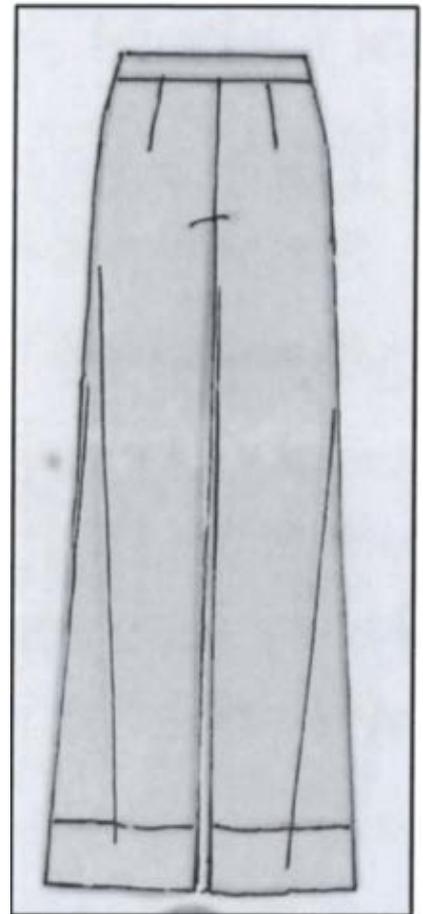
This question is about **Simplicity Pattern 8701** for the pant illustrated below.



Front view



Tie belt



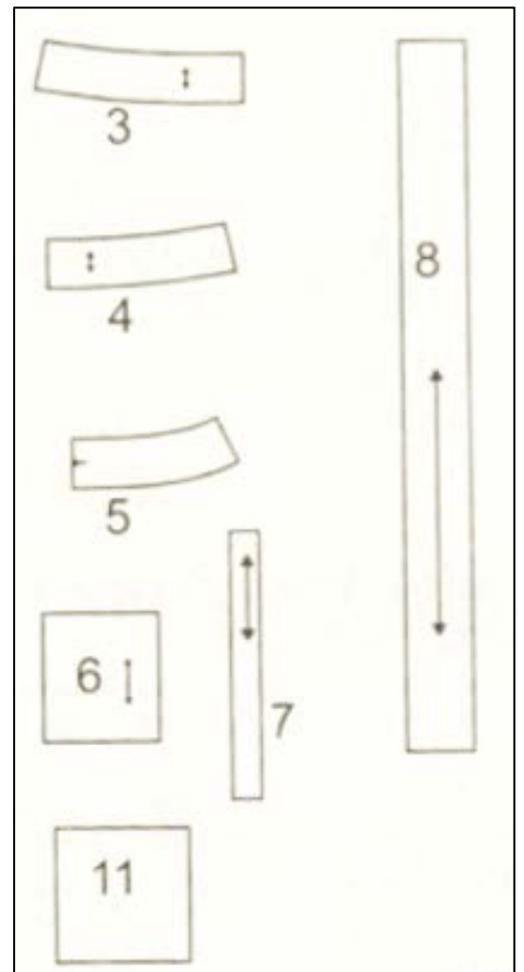
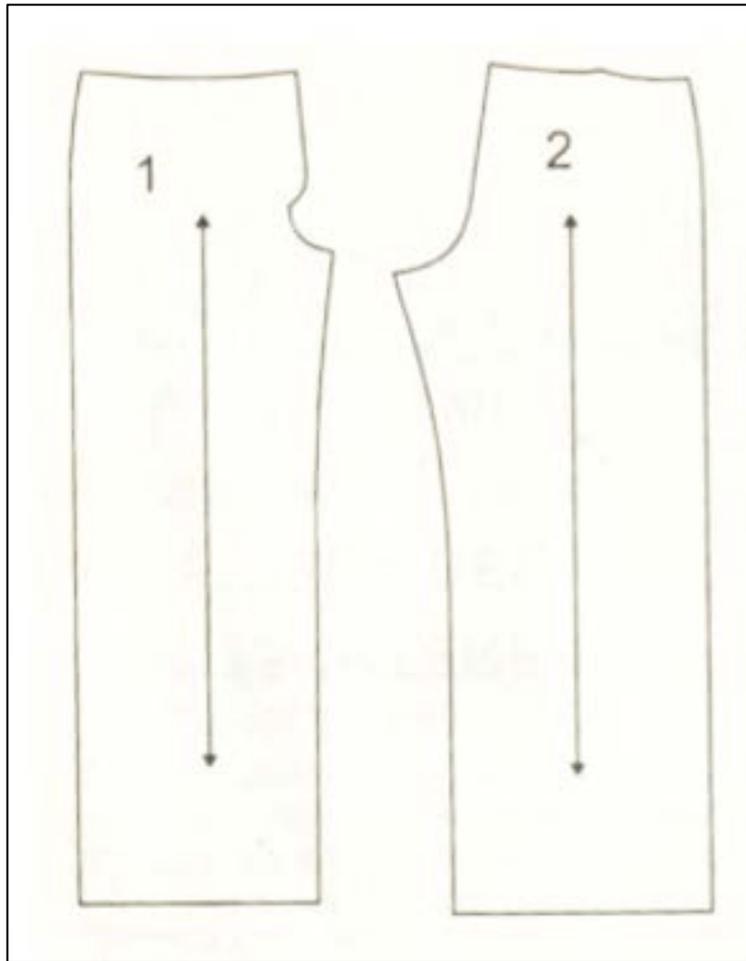
Back view

The pattern pieces required to make **Simplicity Pattern 8701** are as follows:

Pattern Piece Number	Name of Pattern Piece	Number of pieces to cut
1	Front	2
2	Back	2
3	Right front waistband	2
4	Left front waistband	2
5	Back waistband	2
6	Pocket	2
7	Carrier	2
8	Tie belt	2

Question 10 continued

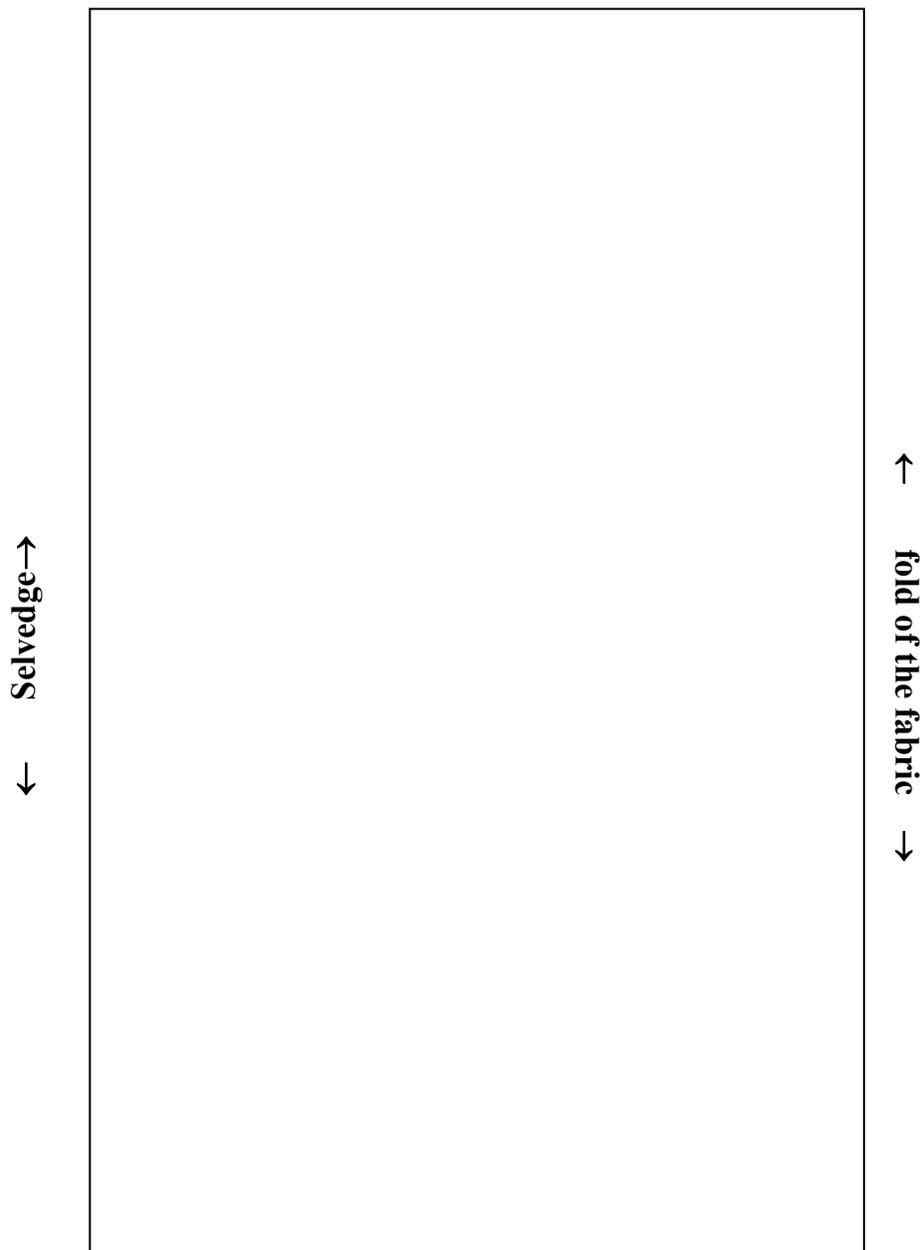
Below are to scale diagrams of the pattern pieces required to make Simplicity Pattern 8701



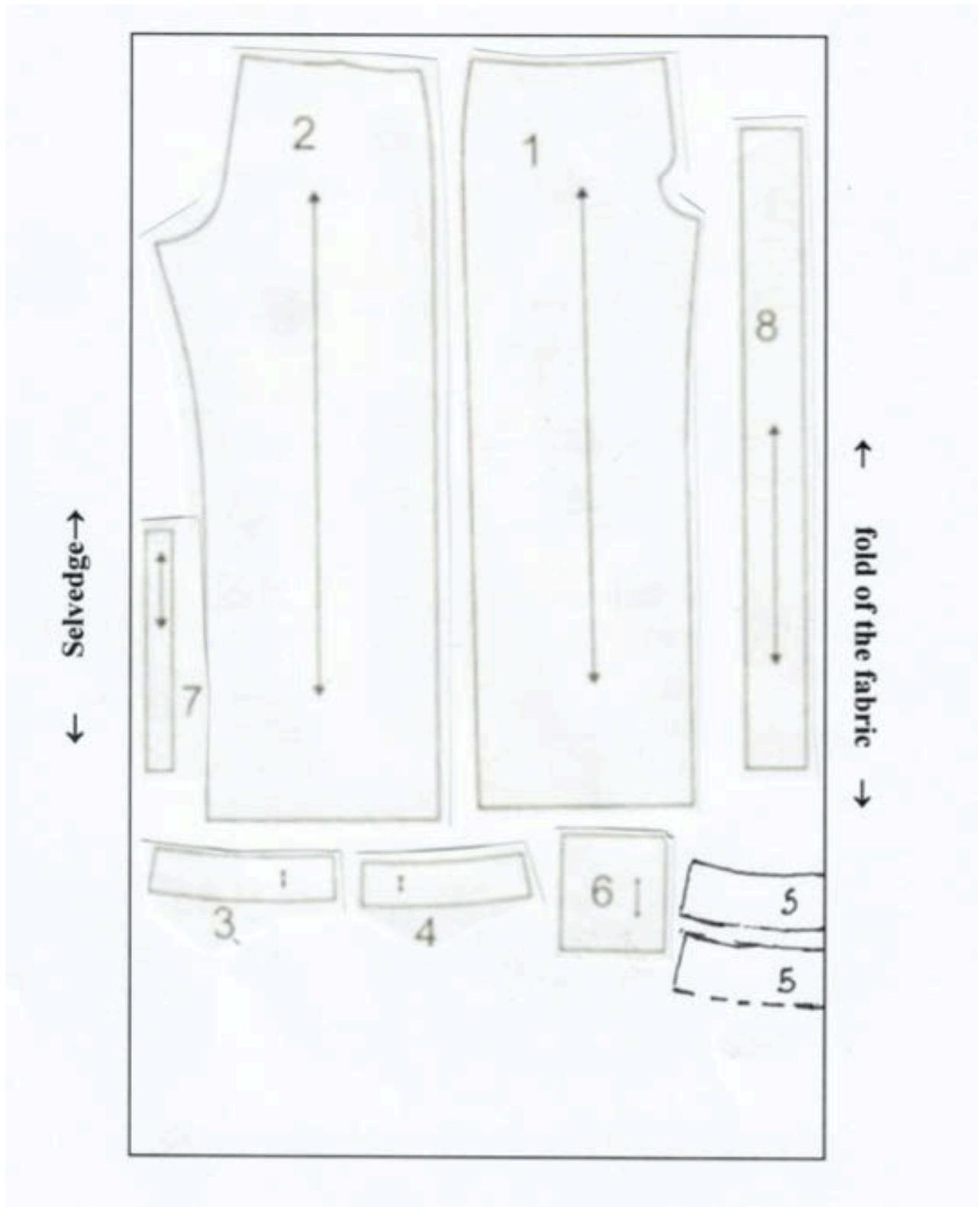
Question 10 continued

- (a) In the space provided below on this page and using the pattern pieces on the coloured paper insert, create the most economical layout plan that can be used to cut the pieces for this pant using 150 cm wide corduroy fabric. (Note: use scissors and glue to achieve this.) (6 marks)

Q10A	create the most economical layout plan that can be used to cut the pieces for this pant using 150 cm wide corduroy fabric
1 mark	For the placement of each pattern piece note : use with nap layout as fabric is corduory
6 marks	



The fabric shown is a double layer, folded in the centre lengthwise



cher

See next page

Question 10 continued.

(b) The materials required to create **Simplicity Pattern 8701** in a size 12 are as follows:

Corduroy fabric 150cm wide	1.5 metres
Zipper 18cm	1
Button 1.2 cm wide	1
Thread	2 reels
Fusible interfacing 51 cm wide	0.70 metre

Fill in the table below to calculate the budget for this pant.

(4 marks)

Q10B	<b>Fill in the table below to calculate the budget for this pant.</b>
4 marks	For correctly calculating the amounts. 1 mark off for each error.
4 marks	

Item	Width	Cost per/m	Quantity	Cost
Corduroy fabric	150 cm	\$5.88	1.5M	\$13.23
Zipper	18cms	\$3.99	1	\$3.99
Button	1.2 cm	\$1 each	1	\$1
Thread	100 metres	\$4.10 each	2	\$8.20
Vilene (fusible interfacing)	51 cm wide	\$7.00	0.7m	\$4.90
<b>Total Cost</b>	<b>\$31.32</b>			

(c) **Applique** will be used to create a flower design on the leg of this pant. See the illustration below. Name

Q10C	<b>Applique</b> will be used to create a flower design on the leg of this pant. See the illustration below. Name the product used to adhere the fabrics
1 mark	For correctly identifying vliesofix

Name of product: **Vliesofix**

(1 mark)

(d) Explain the **safety procedures** that need to be implemented when using this product and why they need to be implemented.

(2 marks)

Q10C	Explain the <b>safety procedures</b> that need to be implemented when using this product and why they need to be implemented.
1 mark	For correctly identifying the safety procedures
1 mark	For giving the correct reason
2 marks	

**Procedure**

It is important to use baking paper to protect the iron and ironing board( the fabric being ironed in protected from above and underneath) so the glue does not accidentally get deposited on either surface.

**Reason**

This is because the glue will redeposit onto the next piece of fabric ironed and it will not come off.

Question 10 continued

- (e) **Satin stitch** is used for the applique. Explain the steps that need to be taken to ensure a good applique stitch is achieved. (2 marks)

Q10E	<b>Satin stitch</b> is used for the applique. Explain the steps that need to be taken to ensure a good applique stitch is achieved.
2 mark	For describing 2 of the steps and <b>explaining</b> the STEPS
2 marks	

1. Set up the satin stitch: set up the machine with TENSION 4, WIDTH 3.5 AND LENGTH 0.5. This is to fasten the process as it is as close to the correct settings as you can get.
2. Using a piece of scrap fabric with 2 layers of photocopy paper underneath sew out the satin stitch. This keeps the satin stitch situated on the surface of the fabric and stops it being embedded in the fabric =.
3. Adjust the length dial minimally each time until the stich comes together to form a satin like surface. This ensure the stitching is glossy and smooth
4. Use this stitch set up to sew the satin stitch with the stitching placed 90% on the applique piece and just off the edge. This prevents edges being missed.
5. Bring the threads to the back of the fabric and knotting them at the start and end of the line of sewing. this prevent ugly reverse stitching showing on the front of the work.

**End of Section Three**







