<table>
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<th>Question</th>
<th>Answer</th>
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<td>Producing a plan for cutting the fabric (lay plan) out is an important process in the manufacturing industry. Discuss ways in which computer technology helps at this stage of manufacture. Describe the process</td>
<td>Opportunities for human error. Software can make this process easier. The lay plan can be done on the computer screen and pieces can be moved around easily. When the final version is done this is printed out on paper slightly less wide than than the fabric and using marker stick it is attached to the top layer of the fabric. Fabric is clamped all the way around and the cutter can now use the band saw to cut pieces out.</td>
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<td>Why do you need a production plan before your product can be manufactured?</td>
<td>To help insure that materials and components are available, to meet delivery dates, efficiency of manufacture in terms of cost, to ensure speed, to have an order of work, to take into consideration the machinery available and the skill of the labour force.</td>
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| The design team will make a final prototype of a new product. Describe how this might help ensure that manufacture is trouble free | • To test accuracy of size and shape of the product  
• Check methods of manufacture  
• Decide which staff will be involved in production  
• Test if the machines are suitable  
• Iron out potential problems |
| Give two manufacturing tolerance levels for your product                  | • Determine tolerance levels for seams  
• Placements of style details / trims  
• Tolerance levels for finished sizes  
• Hem width |
| Why would a designer have labels produced in a different factory?         | Producing labels requires specialist machines which are expensive, need trained staff and take up space. It would not be cost effective to have trained staff on an expensive machine producing a small required amount a day. Factories that produce labels thousands of labels per day bring the price of the individual label down. They also check them for faults. |
| Give to dangers when operating industrial sewing machines and how could you reduce the risk? | 1. Sewing or cutting into fingers – Place guards near needles and blades. For cutting wear gloves.  
2. Badly trained personal – improve training of work force.  
3. Long hair or clothing caught in machines – do not wear loose clothing and tie back hair. |
| Look at the computer pattern below. Give three ways of improving this layout and a reason each | 1. Piece C is not on the straight grain this will cause the fabric to twist in use or the fabric pattern will be skewed.  
2. Pattern piece B and D overlapped so that sections of the product will be missing. The fabric is used uneconomically and will cause wastage which will add on costs |
| List three ways in which a manufacturer can cut the cost of making products. | 1. The design could be simplified.  
2. Sourcing the fabric at a lower prize or agreeing large quantity price reduction with the fabric merchant.  
3. Using a computerized lay out system to avoid fabric waste.  
4. Reducing storage cost by storing finished garments for a minimum of time.  
5. Using JIT |
| Cost is a vital consideration in manufacture! Many manufacturers use a ‘just in time’ system to help control costs. What is a ‘just in time’ system? | It helps control costs as materials are delivered when required, this saves money on storage costs. The manufacturer has to pay for the fabric later, therefore closer to delivery dates and closer to their own payment. This saves money on bank charges. |