

Attempt all questions

SECTION A

1. Each of the lawnmowers shown below have been designed for a well known high street DIY retailer.



Electric Hover Mower

Blade—Mild Steel
Handle—Plastic coated Mild Steel
Body—Polypropylene
Gears/Fasteners—Nylon
Cable Length—20 Metres
Weight—4.2 kg

Retail price £29.99

Cylinder Mower (Manually Operated)

Blade—HSS (Tool Steel)
Handle—Foam Rubber coated Aluminium
Body—Mild Steel
Gears/Fasteners—Nylon
Wheels—Metal Alloy
Grass Catcher—Nylon with Polypropylene base
Weight—7.3 kg

Retail price £119.50



1. (continued)

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| (a) Write a product specification for one of the lawnmowers in relation to its target market. | 6 |
| (b) Justify the choice of materials used to produce both lawnmowers. | 6 |
| (c) Identify and justify the production processes that could be used to manufacture both lawnmowers. | 6 |
| (d) Explain the ergonomic issues associated with both lawnmowers. | 4 |
| (e) Describe the appeal of both lawnmowers from the consumer's viewpoint. | 4 |
| (f) Describe how the design of both lawnmowers has been influenced by functional issues. | 4 |
| Total for Section A | (30) |

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