Directions
Do not write in this book during perusal time.
You must:
• cross out any draft work that is not to be assessed
• show all working using appropriate and accurate mathematical terms and symbols
• show sufficient working to justify your responses.

After the examination session
The supervisor will collect this book when you leave.

Candidate use
Print your candidate number here

Supervisor use only
Supervisor’s initials

QCAA use only
Marker number

Marker use only

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Standard awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication and justification (CJ)</td>
<td></td>
</tr>
<tr>
<td>Knowledge and procedures (KP)</td>
<td></td>
</tr>
<tr>
<td>Modelling and problem solving (MP)</td>
<td></td>
</tr>
</tbody>
</table>

| Modelling and problem solving (MP) |
| Complexity/initiative increasing    |
| Question  | 1g iii | 3b | 1f | 2d | 4e |
| Result     |        |    |    |    |    |
Question 2c

Not to scale

Pool

10.3 m

7.8 m

10.8 m

1.2 m
Question 3a

Question 3b

Blood pressure

Trial group

Control group
### Question 3c

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Holds driver licence</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Does not hold driver licence</td>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>10</strong></td>
<td><strong>8</strong></td>
<td><strong>18</strong></td>
</tr>
</tbody>
</table>

### Question 3d

...
Question 4a

Not to scale

Proston

Cloyma

Mondure

Murgon

Goomerri

Kilkivan

Wondai

Cherbourg

Question 4b

Not to scale
Question 4d

![Question 4d Diagram](image-url)

**KEY**
- • waiting time
- ■ service time

**Customers**
- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K

**Time (minutes)**
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20

**Customers waiting time**

**Service time**
Question 4e — spare
Question 4e — spare

<table>
<thead>
<tr>
<th>Time (minutes)</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>30</td>
<td>0</td>
</tr>
<tr>
<td>32</td>
<td>0</td>
</tr>
</tbody>
</table>