

| Question       | Scheme   | Marks      | AOs  |
|----------------|--|------------|------|
| <b>1(a)(i)</b> | $2x - 10 < 3(5 - x) \Rightarrow 2x - 10 < 15 - 3x \Rightarrow 5x < 25$ | M1         | 1.1b |
|                | $x < 5$  | A1         | 1.1b |
|                |  | <b>(2)</b> |      |
| <b>(ii)</b>    | $x^2 - 11x + 24 = 0 \Rightarrow x = 3, 8$                              | M1         | 1.1b |
|                | $3 \leq x \leq 8$  | A1         | 1.1b |
|                |  | <b>(2)</b> |      |
| <b>(b)</b>     | $3 \leq x < 5$   | B1         | 2.2a |
|                |  | <b>(1)</b> |      |

**(5 marks)**

### Notes

**(a)(i)**

M1: Expands the rhs and collects terms to obtain the form  $ax < b$  or  $ax > b$

A1: Correct answer

**(ii)**

M1: Attempts to solve the quadratic and get the critical values

A1: Correct range

**(b)**

B1: Deduces the correct range