| Question   | Scheme  | Marks | AOs  |
|--|---|-------|------|
| 1  | Finds critical values $x^2 - x > 20 \Rightarrow x^2 - x - 20 > 0 \Rightarrow x = (5, -4)$ | M1    | 1.1b |
|  | Chooses outside region for their values Eg. $x > 5$ , $x < -4$                            | M1    | 1.1b |
|  | Presents solution in set notation $\{x: x < -4\} \cup \{x: x > 5\}$ oe                    | A1    | 2.5  |
|  |   | (3)   |      |
| (3 marks)  |   |       |      |
| <ul> <li>Notes</li> <li>M1: Attempts to find the critical values using an algebraic method. Condone slips but an allowable method should be used and two critical values should be found</li> <li>M1: Chooses the outside region for their critical values. This may appear in incorrect inequalities such as 5 &lt; x &lt; -4</li> <li>A1: Presents in set notation as required {x:x &lt; -4} ∪ {x:x &gt; 5} Accept {x &lt; -4 ∪ x &gt; 5}.</li> <li>Do not accept {x &lt; -4, x &gt; 5}</li> </ul> |   |       |      |
| Note: If there is a contradiction of their solution on different lines of working do not penalise intermediate working and mark what appears to be their final answer.   |   |       |      |