| Question | Scheme | Marks | AOs |
|---|---|---|---|
| 3(a) | $-3x^2$ should be $(+)3x^2$ | B1 | 2.3 |
| | | **(1)** | |
| (b) | $x^2-27x+3x^2+162-36x+2x^2=0$<br>$\Rightarrow 6x^2-63x+162=0$ | M1 | 1.1b |
| | $2x^2-21x+54=0\Rightarrow(2x-9)(x-6)=0\Rightarrow x=...$ | M1 | 1.1b |
| | $x=\frac{9}{2}$, 6 | A1 | 1.1b |
| | $y=\frac{9}{2}$, 3 | A1 | 1.1b |
| | | **(4)** | |
| | | | **(5 marks)** |

**Notes**

(a)

B1: Identifies the error in the solution

(b)

M1: Proceeds to a 3 term quadratic in either variable, either applies the correction or starts again

M1: Solves their 3TQ

A1: Correct $x$ values

A1: Correct $y$ values