

| Q | Marking instructions                                                                                          | AO   | Marks | Typical solution                                                                                                                                          |
|---|---------------------------------------------------------------------------------------------------------------|------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5 | Integrates at least one term correctly, may be unsimplified                                                   | 1.1a | M1    | $\int \left( 4x - 3 + x^{-\frac{1}{2}} \right) dx$ $= \frac{4x^2}{2} - 3x + \frac{x^{\frac{1}{2}}}{\frac{1}{2}} + c$ $= 2x^2 - 3x + 2x^{\frac{1}{2}} + c$ |
|   | Integrates at least two terms correctly, may be unsimplified                                                  | 1.1a | M1    |                                                                                                                                                           |
|   | Obtains $2x^2 - 3x + 2x^{\frac{1}{2}} + c$<br>or $2x^2 - 3x + 2\sqrt{x} + c$<br>or $2x^2 - 3x + 2x^{0.5} + c$ | 1.1b | A1    |                                                                                                                                                           |
|   | Question 5 Total                                                                                              |      | 3     |                                                                                                                                                           |