| Question | Scheme | Marks | AOs |
| :---: | :---: | :---: | :---: |
| 4(a) | $\sqrt{3^{2}+12^{2}}$ | M1 | 1.1b |
|  | $=3 \sqrt{17}$ | A1 | 1.1b |
|  |  | (2) |  |
| (b) | $6 b-9 a=-3$ and $15 a+4 b=12 \rightarrow a=\ldots$ or $b=\ldots$ | M1 | 3.1a |
|  | One of $a=\frac{2}{3}$ or $b=\frac{1}{2}$ | A1 | 1.1b |
|  | $a=\frac{2}{3}$ and $b=\frac{1}{2}$ | A1 | 1.1b |
|  |  | (3) |  |
| (5 marks) |  |  |  |
| Notes |  |  |  |
| (a) |  |  |  |
| M1: Attempts Pythagoras' theorem correctly by squaring and adding before taking the square root. |  |  |  |
| A1: $3 \sqrt{17}$ cao |  |  |  |
| (b) |  |  |  |
| M1: Forms and solves two correct simultaneous equations leading to a value for $a$ or $b$. Condone sign slips. |  |  |  |
| A1: $\quad a=\frac{2}{3}$ or $b=\frac{1}{2}$ |  |  |  |
| A1: $\quad a=\frac{2}{3}$ and $b=\frac{1}{2}$ |  |  |  |

