| | | | | |
|---|---|---|---|---|
| | | | | **Total 6 marks** |

| | | | | | |
|---|---|---|---|---|---|
| **19** | $a + 24d = 44.5$ | | 5 | M1 | oe |
| | $\frac{30}{2}(2a+(30-1)d) = 765$ oe,<br>eg (15(2a + 29d) = 765), (2a + 29d = 51), etc | | | M1 | oe (may be simplified) |
| | e.g. 2(44.5 – 24d) + 29d = 51 oe or<br><br>_2a + 48d = 89<br>2a + 29d = 51 oe | | | M1 | dep on M2, a complete method to eliminate one variable, allow one arithmetic error |
| | | 26.5 | | A2<br><br>(A1) | dep on M2, oe<br><br>dep on M2. If not A2, award A1 for $a = -3.5$ **or** $d = 2$ |
| | | | | | **Total 5 marks** |

| | | | | |
|---|---|---|---|---|
| **20** | 125 **or** $10^{21n}$ | | 3 | M1 |
| | $125 \times 10^{21n}$ | | | M1 |
| | | $1.25 \times 10^{21n+2}$ | | A1 |
| | | | | **Total 3 marks** |