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|----------|--------------------------------|----------------|---|--|
| 1 | 98^{91} | B1 | cao | Must be clear and unambiguous |
| 2 | $2 \times 2 \times 31$ | M1 A1 | for a complete method to find prime factors; could be shown on a complete factor tree with no more than one error or by division by prime factors with no more than one error or for 2, 2, 31, (1) for $2 \times 2 \times 31$ oe | Condone the inclusion of 1 for this mark Accept $2^2 \times 31$ |
| 3 | $2^2 \times 5^3$ | M1 M1 A1 | for a complete method to find prime factors; could be shown on a complete factor tree with no more than one error or by division by prime factors with no more than one error for complete factorisation, eg 2, 2, 5, 5, 5 for $2^2 \times 5^3$ | Condone the inclusion of 1 for the method marks Could be shown on a fully correct factor tree |
| 4 | Pair of values | P1 A1 | for at least 5 multiples of 5 (with no more than 1 incorrect) or for at least 5 multiples of 7 (with no more than 1 incorrect) or for $m =$ a multiple of 35 and $n =$ a multiple of 14 or for $m = 35$ or $n = 14$ for a correct pair of values, eg $m = 35$ and $n = 14$ or $m = 35$ and $n = 28$ or $m = 105$ and $n = 14$ | $m = 35, n = 14, 28, 42, 56, 84, \dots$ $m = 105, n = 14, 28, 56, 98, \dots$ |
| 5 | $2 \times 2 \times 3 \times 5$ | M1 A1 | for a complete method to find prime factors; could be shown on a complete factor tree, with no more than one error or by division by prime factors with no more than one error or for 2, 2, 3, 5 (1) for $2 \times 2 \times 3 \times 5$ oe | Condone the inclusion of 1 for the method mark Accept $2^2 \times 3 \times 5$ |
| 6 | (a) 63 (b) 15 876 | B1 M1 A1 | for 63, accept $3 \times 3 \times 7$ or $3^2 \times 7$ for at least two of $2^2, 3^4, 7^2$ or shows at least 3 multiples of 2268, eg 2268, 4536, 6804 and at least 3 multiples of 441, eg 441, 882, 1323 for 15 876 or $2^2 \times 3^4 \times 7^2$ oe | (A =) $2^2 \times 3^4 \times 7$ scores 0 marks |