Extending a pattern and determining its formula

1. **(a)** 10, 12, 14, 16, 18, 20   *1*   *all entries*

                   28   *1*

                   38   *1*

                   48   *1*

       (b) $b = 2n$ .....   *1*   *multiplier*

                  .....$+ 8$ *1*   *addition*

       (c) $2 \times 23 + 8$ *1*   *substitution*

                  54 burgers   *1*   *answer*

           [8]

2. **(a)** 15, 18   *1*   *both entries*

                   39   *1*

       (b) $b = 3d$ .....   *1*   *multiplier*

                  $+ 3$ *1*   *addition*

       (c) $3d + 3 = 57$ *1*   *setting up equation*

                  18 diamonds   *1*   *solution*

                          [6]

[14 marks]