AQA – Sequence and series – AS Mathematics P2

1. June/2021/Paper_7356/2/No.4

   (a) Find the binomial expansion of $(1 - 2x)^5$ in ascending powers of x up to and including the term in x^2

   [2 marks]

   (b) Find the first two non-zero terms in the expansion of

   $$(1 - 2x)^5 + (1 + 5x)^2$$

   in ascending powers of x.

   [2 marks]

   (c) Hence, use an appropriate value of x to obtain an approximation for $0.998^5 + 1.005^2$

   [2 marks]