Edexcel AS Maths The binomial expansion

Topic assessment

1. Expand $(2-x)^5$. [5]

2. Expand $(3+2x)^4$. [4]

3. Find the first three terms in the expansion of $(1-2x)^{15}$ in ascending powers of x. [4]

4. Find the term in x^3 in the expansion of $(2-3x)^8$. [3]

5. Find the constant term in the expansion of $\left(3x - \dfrac{1}{2x}\right)^6$. [3]

6. (i) Find the first three terms in the expansion of $(1+2x)^{10}$ in ascending powers of x. [3]

   (ii) Use the substitution $x = 0.01$ and your answer to (a) to find an approximate value for 1.02^{10}. Give your answer to an appropriate number of decimal places. [3]

Total 25 marks