

Advanced Higher Maths  
SQA 2016 Specimen  
Question 2



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State and simplify the general term in the binomial expansion of  $\left(2x - \frac{5}{x^2}\right)^6$ .  
Hence, or otherwise, find the term independent of  $x$ .

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Answers:

$$\binom{6}{r} (2x)^{6-r} \left(-\frac{5}{x^2}\right)^r$$

The term that is independent of  $x$  is 6000.