

Advanced Higher Maths
SQA 2016 Specimen
Question 12



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- (a) Given that m and n are positive integers state the negation of the statement:
 m is even or n is even. 1
- (b) By considering the contrapositive of the following statement:
if mn is even then m is even or n is even,
prove that the statement is true for all positive integers m and n . 3
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Answers:

- (a) m is odd and n is odd.
- (b) Direct proof of the contrapositive, i.e. that if m and n are both odd then mn is odd.