8 (a) The first three terms of an arithmetic progression are 25, $4p - 1$ and $13 - p$, where p is a constant.

Find the value of the tenth term of the progression. [4]

(b) The first three terms of a geometric progression are $25, 4q - 1$ and $13 - q$, where q is a positive constant.

Find the sum to infinity of the progression. [4]

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