

- 10 (a)** An arithmetic progression contains 25 terms and the first term is -15 . The sum of all the terms in the progression is 525. Calculate
- (i) the common difference of the progression, [2]
 - (ii) the last term in the progression, [2]
 - (iii) the sum of all the positive terms in the progression. [2]
- (b)** A college agrees a sponsorship deal in which grants will be received each year for sports equipment. This grant will be \$4000 in 2012 and will increase by 5% each year. Calculate
- (i) the value of the grant in 2022, [2]
 - (ii) the total amount the college will receive in the years 2012 to 2022 inclusive. [2]