7 Taylor places £350 in a savings account. Interest is added into the savings account at the end of each year.

For the first 2 years, the account pays 3% compound interest per year.

After the first 2 years, the account pays 1.5% compound interest per year.

(a) Determine the value of Taylor's investment at the end of 15 years. **[3]**

(b) In this question you must show detailed reasoning.

Using logarithms, find the number of years after which Taylor's investment is first worth more than £500. **[4]**