Number - Compound Interest

Toby invested £4500 for 2 years in a savings account.
He was paid 4% per annum compound interest.

(a) How much did Toby have in his savings account after 2 years?

(3)

Jaspir invested £2400 for n years in a savings account.
He was paid 7.5% per annum compound interest.

At the end of the n years he had £3445.51 in the savings account.

(b) Work out the value of n.

(2)

Number - Compound Interest

Toby invested £4500 for 2 years in a savings account.
He was paid 4% per annum compound interest.

(a) How much did Toby have in his savings account after 2 years?

£4500 × 1.04 × 1.04

= £4500 × 1.04^2

= £4867.20

(To add on 4% we can simply multiply by 1.04)

(3)

Jaspir invested £2400 for n years in a savings account.
He was paid 7.5% per annum compound interest.

At the end of the n years he had £3445.51 in the savings account.

(b) Work out the value of n.

$2400 \times 1.075^n = £3445.51$

Use trial and error method on calculator to find:

$2400 \times 1.075^5 = £3445.51$

so $n = 5$

(2)