

- 2 (a) Alex, Bobbie and Chris share strawberries in the ratio Alex : Bobbie : Chris = 3 : 2 : 2.
Chris receives 12 strawberries.

Calculate the total number of strawberries shared.

..... [2]

- (b) In a sale, a shop reduces all prices by 12%.

- (i) Dina buys a book which has an original price of \$6.50 .

Calculate how much Dina pays for the book.

\$ [2]

- (ii) Elu pays \$11 for a toy.

Calculate the original price of the toy.

\$ [2]

- (c) Feri invests some money.

The rate of interest for the first year is 2.5%.

At the end of the second year the overall percentage increase of Feri's investment is 6.6%.

Find the rate of interest for the second year.

..... % [2]

- (d) A radioactive substance decays at an exponential rate of 2% per day.
The initial mass is 80 g.

(i) Find the mass at the end of 5 days.

..... g [2]

(ii) Find how many **more** whole days, after day 5, it takes for the mass to reduce to less than 67 g.

..... [3]