

- 1 Mr and Mrs Sayed and their 3 children go on holiday.
They travel to the airport by train.

(a) The train departs at 1620.

(i) They leave home 45 minutes before the train departs.

Find the time at which they leave home.

Answer(a)(i) [1]

(ii) Write 1620 using the 12-hour clock.

Answer(a)(ii) [1]

(b) The train fare is \$24 for an adult.

The train fare for a child is $\frac{2}{3}$ of an adult fare.

Find

(i) the fare for a child,

Answer(b)(i) \$ [1]

(ii) the total fare for Mr and Mrs Sayed and their 3 children.

Answer(b)(ii) \$ [2]

2 Aminata buys a business costing \$23 000.

(a) She pays part of this cost with \$12 000 of her own money.

Calculate what percentage of the \$23 000 this is.

Answer(a) % [1]

(b) Aminata’s brother gives her 32% of the remaining \$11 000.

Show that \$7 480 is still needed to buy the business.

Answer(b)

[2]

(c) Aminata borrows the \$7 480 at a rate of 3.5 % per year **compound** interest.

Calculate how much money she owes at the end of 3 years.

Answer(c) \$ [3]

(d) In the first year Aminata spent \$11 000 on salaries, equipment and expenses.

$\frac{2}{5}$ of this money was spent on salaries, 0.45 of this money was spent on equipment and the remainder was for expenses.

Calculate how much of the \$11 000 was spent on

(i) salaries,

Answer(d)(i) \$ [1]

(ii) equipment,

Answer(d)(ii) \$ [1]

(iii) expenses.

Answer(d)(iii) \$ [1]

(e) The three items in **part (d)** are in the ratio salaries : equipment : expenses = 0.4 : 0.45 : 0.15 .

Write this ratio in its simplest form.

Answer(e) : : [2]