## fs4u

## Maths Level 1

## Test your skills - open ended task

## Sections 1-3 <br> Planning a holiday

## Applying skills in:

- whole numbers
- fractions, decimals and percentages
- ratio, proportion and formulae

Answer all questions in this task.
Write your answers in the spaces provided.


Where you see this sign you must show how you get your answers as marks may be awarded for your working out.

You may use a calculator.

Here is part of a brochure for holidays in Ibiza, Spain.

Oasis Hotel
3 Star Hotel $\quad \star \star \star$
The Oasis is situated directly in front of the Portinatx beach. The complex consists of the hotel Oasis, Oasis Playa and the apartments.

| Traveller Rating: | Room \& Board Type |  |
| :--- | :--- | ---: |
| 14 days | Twin beds | Cost Per Person |
| 2 Adults | Half Board |  |
|  | Twin beds |  |
| 2 Adults | Full Board |  |
|  |  | $£ 440.00$ |
|  |  |  |

## Club Vista Hotel 3 Star Hotel $1 \star \star \star$

The Club Vista Bahia is situated in Portinaxt, Ibiza. It has 175 large rooms and 4 pools. There is a restaurant, bar, playground, tennis court and the other hotel facilities to make guests' stay entertaining. It is the ideal destination for families and couples looking for a relaxing holiday. The hotel is next to the beach and approximately 33 km from the airport of Ibiza.

|  |  |  |
| :---: | :---: | :---: |
| 14 days | Room \& Board Type | Cost Per Person |
| 4 Adults | 4 beds Garden View |  |
|  | Full Board | £484.50 |

## Cost of flight:

£114 return

## Additional costs per person:

Airport tax £24
Luggage charge £30

The brochure gives some typical costs for your holiday.

| Typical costs of food and drink | in lbiza |
| :--- | ---: |
| Chicken or steak | $£ 6.00$ |
| Hamburger or pizza | $£ 2.50$ |
| French fries | $£ 1.00$ |
| Dessert | $£ 1.20$ |
| Coffee or tea | 55 pence |
| Canned drinks | $\mathbf{6 5}$ pence |

> Average cost of day |rips from the resort: E20

You want to use this information to book a 14-day holiday in Ibiza with a friend. You have a budget of £800 each.

- Use the hotel and flight information given, based on two adults
sharing. - Half board means you have to buy one meal a day.
- Include all the additional costs.
- Include the cost of at least one day trip from the resort.
- Any of your budget not spent on the cost of the holiday will be your spending money.



## Guidance

In open ended tasks there can be more than one acceptable solution. Marks are awarded for method, so it is important you make your method clear to the examiner.
Firstly, take your time to read the question carefully and read through all the information given. Next, identify all the information you need to tackle the problem.

A plan can help you to work through the problem. A possible plan could be:

- list all the costs of the holiday
- work out the cost for 'Half Board' and the cost for 'Full Board'
- work out the total cost of the meals for 14 days
- work out the total of all the additional costs
- add all the costs for each type of holiday and take away from £800 to find out how much spending money you will have
- subtract these two answers to find the difference in spending money available for your holiday.
Make sure that your answers are clear and that the examiner can identify each stage in your working as you work through your plan. You should consider including headings and tables as well as underlining answers that you use later in your workings. A conclusion at the end of your working will help make your method clear to the examiner, so that marks can be awarded.
Starting with the list, the costs are:
- accommodation
- flight
- airport tax
- luggage charge
- travel insurance
- cost of food for 14 days (for half board holiday)
- cost of day trips.

From the first table:
the cost of the half board holiday per person is
$£ 335.00$ the cost of the full board holiday is $£ 440.00$
The second table shows the cost for four adults sharing, which is not appropriate for your holiday.
Using the table for the travel insurance, for a 14-day holiday if you are age 16 to 64 this will be $£ 20$ each.
The rest of the costs will be the same for both holidays, but you need to work out the cost of a meal per person for 14 days for the half board holiday.

If you plan to have a main meal, a dessert and a drink, the most expensive meal option is:

| Chicken or steak | $£ 6.00$ |
| :--- | :---: |
| French fries | $£ 1.00$ |
| Dessert | $£ 1.20$ |
| Canned drink | $£ 0.65$ (changed to pounds) |
|  | Total $£ 8.85$ |

If you round this cost to $£ 9.00$
Cost of 14 meals $=14 . £ 9.00=£ 126.00$
Using a table to make your comparison helps as a check that you have included all the relevant costs.

| Costs | Half board | Full board |
| :--- | ---: | ---: |
| Accommodation | $£ 335.00$ | $£ 440.00$ |
| Flight | $£ 114.00$ | $£ 114.00$ |
| Travel insurance | $£ 20.00$ | $£ 20.00$ |
| Food for 14 days | $£ 126.00$ |  |
| Airport tax | $£ 24.00$ | $£ 24.00$ |
| Luggage charge | $£ 30.00$ | $£ 30.00$ |
| One day trip | $£ 20.00$ | $£ 20.00$ |
|  | $£ 66.00$ | $£ 648.00$ |

The total budget for the holiday is $£ 800$
Spending money for half board holiday $=£ 800-£ 669=£ 131.00$
Spending money for full board holiday $=£ 800-£ 648=£ 152.00$
Difference in spending money $=£ 152.00-£ 131.00=£ 21$

## Conclusion

The total cost of a half board holiday is $£ 669.00$. The price includes the cost of travel insurance, airport tax and luggage charge, the maximum cost of a meal and one drink each day and the cost of one day trip.
The total cost of a full board holiday is $\mathbf{£ 6 4 8 . 0 0}$. The price includes the cost of travel insurance, airport tax and luggage charge and the cost of one day trip.
Your total budget was $£ 800$, so the half board holiday will give you $\underline{£ 131.00}$ spending money and the full board holiday will give you $£ 152.00$ spending money. The difference in the amount of spending money is $£ 21.00$.

