How to do Functional Skills questions

- break down the question into simple stages
    - so you get them right
    - so your working is clear and well explained (marks for this!)
    - so you do not (for instance) apply the discount twice
- each stage needs a few words of explanation so your intention is clear
- work down the page, so your order of working is clear.
- write down any formulae you use, e.g. A = wh/2 for a triangle
- have a conclusion at the end where you compare values.
    - Remember you can only compare values in similar units. For instance, you can compare 9 m/s with 10 m/s but not 9 m/s with 10 mph. You may need to convert units!

Example (March 2011 question 8)

The table shows the costs, per person, of a holiday at two different hotels.
It shows the cost for 5 nights and the cost for each extra night.
It also shows the discount for each child.

Date holiday starts	Park Palace		Dubai Grand	
	5 nights	extra night	5 nights	extra night
01 Jan – 31 Mar	£1169	£150	£849	£86
01 Apr – 09 Apr	£1229	£150	£1219	£95
10 Apr – 15 Jul	£810	£80	£853	£53
16 Jul – 20 Aug	£810	£80	£854	£53
21 Aug – 10 Dec	£810	£80	£869	£94
Discount for each child	$\frac{1}{5}$ off		15% off	

There are two adults and two children in the Smith family.
The family want a holiday for 7 nights, starting on 1st August.

One hotel will be cheaper for them than the other hotel.

Work out the cost of the cheaper holiday.
You must show all your working.

Think, you need to

- choose a row of the table (1 mark)
- do a Park Palace calculation
- do a Dubai Grand calculation
- compare the two

Within this framework, for each hotel you need to:

- find the price for 2 adults and 2 children as a multiple of the 1 adult price
- find a whole week price for 1 adult
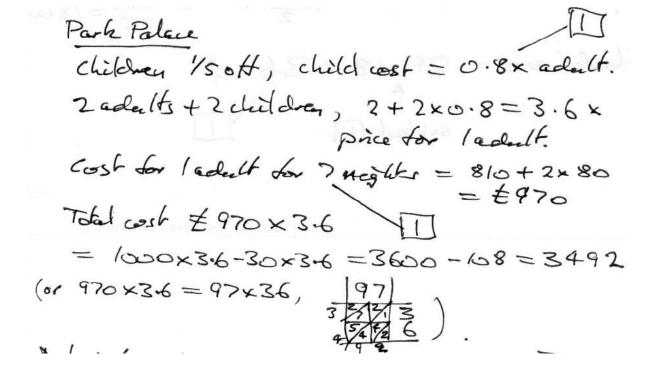- multiply to get the total

or alternatively

- find a whole week price for 1 adult
  - double it, for two adults
  - apply a discount, to convert the 2 adult price to a 2 child price
- add the (2 adult) and (2 children) prices to get a total.

Now look at my solution.

For the first mark, we pick the correct tariff:

10 Apr – 15 Jul	£810	£80	£853	£53
16 Jul – 20 Aug	£810	£80	£854	£53
21 Aug – 10 Dec	£810	£80	£869	£94

starting 1st August

Now I do a calculation for the first hotel:

Park Palace

Children ⅕ off, child cost = 0.8 × adult.

2 adults + 2 children, 2 + 2 × 0.8 = 3.6 × price for 1 adult.

Cost for 1 adult for 7 nights = 810 + 2 × 80
= £970

Total cost £ 970 × 3.6

= 1000 × 3.6 − 30 × 3.6 = 3600 − 108 = 3492

(or 970 × 3.6 = 97 × 36,)

Now I calculate the cost at the second hotel:

Dubai Grande

14 2

[1]

Children 15% off, pay 0.85× adult price

2 adults + 2 children, 2 + 2×0.85 = 3.7× adult price.

1 adult for 7 nights, £854 + 2×53

= 854 + 106 = £960

960 × 3.7 = 96 × 37 = 3552

9	6	
2 7 / 1 8 /		3
6 / 3 4 / 2		7
5 2		

[1] a correct total.

Finally I compare the two and answer the "cost of the cheaper holiday"

Park Palace is the cheaper hotel, it costs
them £3492.   \[1]