## Knox Academy Mathematics Department

4 Question Challenge on...

## Interpreting Tables

Q1 The loan table below shows the monthly repayments for borrowing different amounts from a finance company with and without loan protection.

Answer the questions below from the information in the table.

Sink Before You Can Swim Loans								
	48 months		36 months		24 months			
	with	without	with	without	with	without		
£20 000	492.27	476.66	633.62	601.94	889.81	845.32		
£15 000	398.70	387.76	485.20	460.21	682.36	648.24		
£10 000	279.14	265.18	346.81	329.47	494.91	470.16		
£8 000	223.00	212.50	277.50	263.00	405.50	385.50		

- (a) Ally wants to borrow £15000 and to pay it back over 24 months with loan protection.

  How much would he have to pay back each month?
- (b) How much would he save per month if he took the loan without loan protection?
- (c) Stuart borrowed £10000 and wanted to pay it back over 36 months without loan protection.
  - What is the amount he would have to pay per month?
- (d) Gordon is paying back £263 per month without loan protection.
  - How much did he borrow, how long will it take him to pay the loan back and did he take it with or without loan protection?

Q2 Maria decides to apply for a credit card and compares some of those available.

Credit Card	Annual Fee	APR	Monthly rate	Minimum Payment	
Vista	£12	21·1%	1.61%	£5 or 5%	
Silvercarp	none	19.8%	1.52%	£4 or 4%	
Canadian Express	£15	28.8%	2·13%	£5 or 5%	
National Direct	£10	18.6%	1.43%	£5 or 5%	

(which ever is greater)

- (a) How much is the annual fee for Canadian Express?
- (b) What is the APR for National Direct?
- (c) What is the monthly rate of interest for Vista?
- (d) What is the minimum payment for Silvercarp?
- (e) If Maria spent £150, how much would her minimum payment be with Vista?

Q3 The table below shows the cost of a touring holiday to USA with a stay in either Scottsdale or Las Vegas. Prices are per person.

		Dates						
	Days	Apr 15	Apr 22	May 20 Jun 3	Jun 10	Sep 2, 9, 23	Sep 30	Oct 14
Tour + Scottsdale	16	1965	2035	1999	2059	2069	2115	2039
Tour + Las Vegas	17	2125	2189	2159	2219	2229	2269	2195

- (a) How many days does the Tour and Scottsdale holiday last?
- (b) How much would it cost for these holidays?
  - (i) Tour + Las Vegas leaving on June 10<sup>th</sup> for 2 adults.
  - (ii) Tour + Scottsdale leaving on April 22<sup>nd</sup> for 4 adults.

Q4 This table shows the cost of a holiday to Dubrovnik. Prices are per person.

		Dates						
	Days	Feb 7	Mar 7	Apr 4	May 2	Jun 6	Jul 4	Aug 1
Hotel Imperial	3	386	386	618	699	843	743	775
	7	574	574	062	1123	1327	1279	1311
	10	715	715	1220	1441	1690	1681	1713
	14	903	903	1564	1865	2174	2217	2249
Hotel Excelsior	3	392	392	603	621	765	632	703
	7	588	588	927	941	1145	1059	1143
	10	735	735	1170	1181	1430	1389	1473
	14	931	931	1494	1546	1810	1829	1913

## Calculate the cost of these holidays

- (a) 14 nights in the Hotel Imperial for 2 adults leaving on June  $6^{th}$ .
- (b) 10 nights in Hotel Excelsior for 2 adults leaving on August  $1^{st}$ .
- (c) 3 nights for 2 adults and 1 child in the Hotel Imperial leaving on April  $4^{th}$ .