Deacon's Challenge No. 58 Answer

*** Christmas Special Answer ***

The sales manager of a diagnostics company gives an area rep a crate containing 24 bottles of wine to distribute to his customers on Christmas Eve. The rep, being an enterprising fellow, decides to distribute the wine according to the number of orders placed by each lab. He decides to give a bottle of wine for each 100 packs of reagents purchased over the preceding year. He gives lab B twice as many bottles as lab A, lab C one less than lab B, lab D the same number as lab B and lab E twice as many as lab C. When he gets to lab F he decides to keep two bottles for himself and give this lab one bottle less than they are due. How many packs of reagent did he sell over the year?

The total number of bottles of wine he should have distributed to his customers was 23 (since he had 24 altogether, kept 2 for himself, gave out 22 and he should have given lab F one more).

Each bottle is a reward for purchasing 100 packs of reagent.

Total number of packs sold = $23 \times 100 = 2300 \text{ packs}$

Exam tip:

Examiners sometimes give superfluous information in a question in order to confuse.

Question 59

Stating any assumptions you make, estimate the maximum rise in plasma glucose (in mmol/L) which would be possible if an adult male was given a glucose load of 75g.

(Question suggested by John Morton of Poole General Hospital)