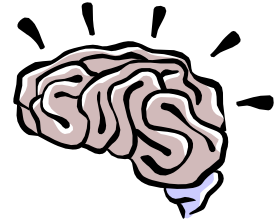


MIND GAMES



Task A

In that terrible week last April, when the showers seemed to merge to form one complete wash out, Sandra Somalta had the job of interviewing householders for a IT survey. The week after she was called into her bosses' office where he was reading her report.

"You visited 230 houses?"

"Yes, that's right."

" And asked them if they had Internet access and if they had a spreadsheet package on their computer?"

"That's right."

"You record that, altogether 168 had a spreadsheet and 133 had access to the Internet."

"Err, yes."

" You also noted that 96 of them had both a spreadsheet and access to the Internet."

" Yes, that's right. They did."

" Did all 230 houses you visited have a computer?"

" Aah, no. 4 didn't have a computer at all and another 11 were out."

" I see.....YOU ARE FIRED!"

Can you explain exactly why Sandra was given the sack?

Task B

In Phase 4 of CensusAtSchool 74% of the students said they owned a mobile phone, and had access to both a computer and the Internet at home. 7 % said they had no access to a computer at home. The percentage reporting they only had access to the Internet plus the percentage with only access to a computer was 6% less than the percentage of students who have both computer and Internet access but no mobile. 11% did not have their own mobile phone. Nobody had both Internet access and a mobile phone but no access to a computer and 6% have only a mobile. 1% do not any of the three – no mobile, no computer access and no Internet access.

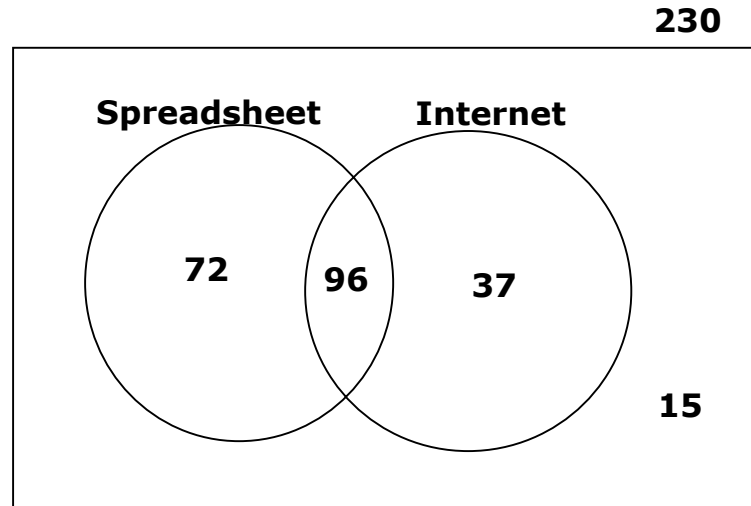
1. What percentage has access to both a computer and a mobile but no access to the Internet?
2. What percentage had computer and Internet access but no mobile?
3. What percentage has Internet access only? Can you suggest a reason for this?
4. What percentage has their own mobile phone?
5. What percentage has two out of the three technologies?
6. What percentage has only one of the technologies



Answers

Task A

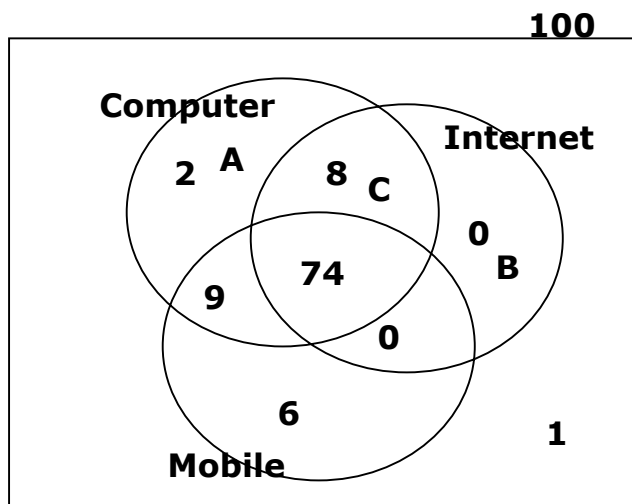
Sandra was given the sack as her boss suspected that she had simply made up the figures and not gone out in the rain to collect the data. The evidence he had was that the figures didn't add up. See the diagram below



These figures add up to 168 totals for spreadsheets and 133 for Internet but the total of $72 + 96 + 37 + 15 = 220$ not the 230 houses she says that she visited.

Task B

The numbers can be shown in the diagram below and are worked out using equations as shown. You need to use the given facts that 93% said they had access to a computer and 89% have a mobile.



Equations:
 $100 = 89 + 1 + A + B + C$
 $A + B = C - 6$
 $100 = 90 + 2C - 6$
 $16 = 2C$
 $C = 8$