

Q1) T, F $\frac{2}{\quad} \frac{2}{\quad} \dots \rightarrow \begin{array}{r} 29 \\ 11 \\ 512 \end{array}$

Q2) $\frac{6}{\quad} \frac{6}{\quad} \frac{5}{\quad} = 36.5 = 180$

a) $\frac{6}{\quad} \frac{6}{\quad} \frac{5}{\quad} = 36.5 = 180$

b) $\frac{5}{\quad} \frac{5}{\quad} \frac{3}{\quad} = 75$

c) $\frac{4}{\quad} \frac{6}{\quad} \frac{5}{\quad} = 120$
3, 4, 5, 6

Q4) 80 people ~~Q3~~ solution is after this solution

	cola 2	cola n	cofe sugar	cofe ns
cola 2	33			27
cola n		47	19	28
cofe s			25	
cofe ns				55

cola zero, cofe ns $\rightarrow \underline{27}$

$55 - 27 = 28$

cofe non sugar, normal cola

$$117 - 28 = 19 \rightarrow \text{normal kola, coffee sugar}$$

$$\begin{array}{r} 19 \\ \hline 25 \\ \hline \hline \end{array}$$

Q3)

500 student

83 meds, alcohol

210 smoke

122 smoke alcohol

258 alcohol

97 smoke, meal

216 meds

52 all of

a) smoke but not alcohol

210 \rightarrow all smoke

122 \rightarrow smoke and alcohol

$$\begin{array}{r} 210 \\ - 122 \\ \hline 88 \end{array} = \begin{array}{r} 88 \\ \hline 500 \\ \hline \hline \end{array}$$

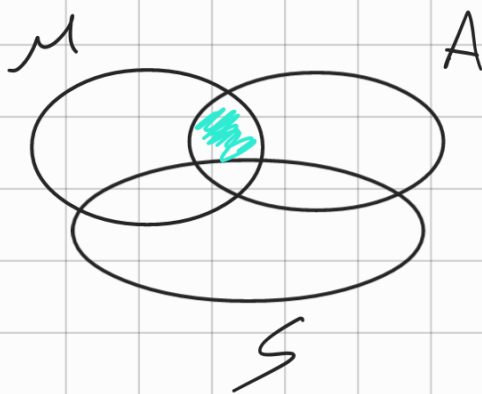
c) neither smokes nor eat meals
~~AA~~ b's solution is after this solution

$$\begin{array}{r}
 210 \rightarrow \text{smoke} \\
 216 \rightarrow \text{meal} \\
 \hline
 426 \rightarrow \text{smoke or meal} \\
 97 \rightarrow \text{smoke and meal} \\
 \hline
 329 \rightarrow \text{so we find smoke \cup meal}
 \end{array}$$

~~AA~~ so we will do $1 - \frac{329}{500}$

$$= 1 - \frac{329}{500} = \frac{171}{500}$$

b) meals and alcohol not smoke



$$\rightarrow (M \cap A) - (M \cap A \cap S)$$

$$\begin{array}{ccc}
 \downarrow & & \downarrow \\
 83 & - & 52
 \end{array}$$

$$= \frac{31}{500}$$

