1

Windows computers = 2

Linux = N-2

the probability that all the four students sit at linux computers is eaual to the probabibity of chosing 4 out of N-2 linux computers divided by the the total number of ways to chose 4 computers out of N - total computers

$$A = \frac{\binom{N-2}{4}}{\binom{N}{4}} \quad A = \frac{\binom{N-2}{4}}{\binom{N}{4}}$$

the probability that two of the four students sit at a windows computer is

$$B = \frac{\binom{2}{2} \cdot \binom{N-2}{2}}{\binom{N}{4}}$$

Given that $A = B$

$$\frac{\binom{N-2}{4}}{\binom{N}{4}} = \frac{\binom{2}{2}\cdot\binom{N-2}{2}}{\binom{N}{4}}$$

Solving for N

$$\binom{N-2}{4} = \binom{N-2}{2}$$

$$\frac{(N-2)!}{4!(N-6)!} = \frac{(N-2)!}{2!(N-4)!}$$

$$(N-2)(N-3) = 12$$

$$N^2 - 5N + 6 = 12$$

$$N^2 - 5N - 6 = 0$$

Solving for N give $N = 6$ or $N = -1$

But number of computers N cannot be Negative

therefore total number of computers $= 6$