

## Answer on Question #44508 – Math - Statistics and Probability

### Problem.

- 1) If you have a school report which has 53 rows of assessment criteria.
- 2) You have 5 marking criteria for each row (in terms of qualitative assessment)
- 3) What are the chances that a 2008 and a 2009 year report on the same child are exactly the same?

Thanks

### Solution.

There are  $5^{53}$  ways to fill report (5 different possibilities for each row). Hence there are  $5^{53} \cdot 5^{53}$  ways to fill 2008 and 2009 years reports. There are  $5^{53}$  cases, when two reports are exactly the same. Therefore the probability equals

$$p = \frac{5^{53}}{5^{53} \cdot 5^{53}} = \frac{1}{5^{53}}.$$