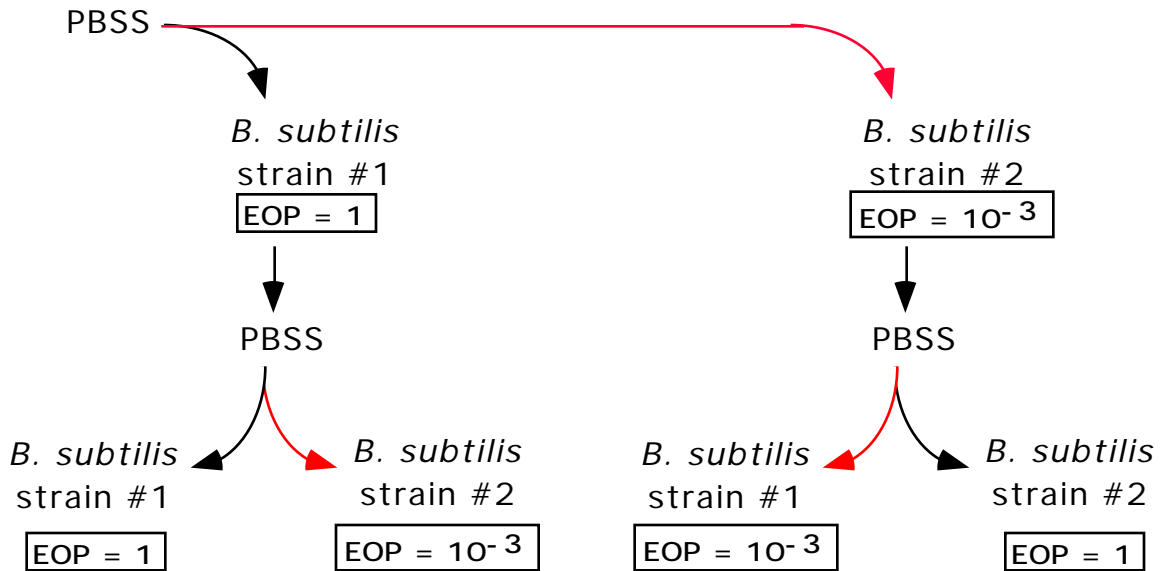


One-minute write 4/6/00

When phage PBSS infects two different strains of *Bacillus subtilis* the following EOP are obtained. Explain the results.



ANSWER: The two *B. subtilis* strains must have different RE systems: Phage PBSS was initially modified by growth in strain #1, hence it was not restricted when it infected strain #1 but because it was not modified for the RE system in strain #2, it was restricted upon infecting strain #2. Growth in strain #2 resulted in modification for the RE system in strain #2, hence now phage PB22 was not restricted when it infected strain #2 but because it was not modified for the RE system in strain #2, it was restricted upon infecting strain #1.