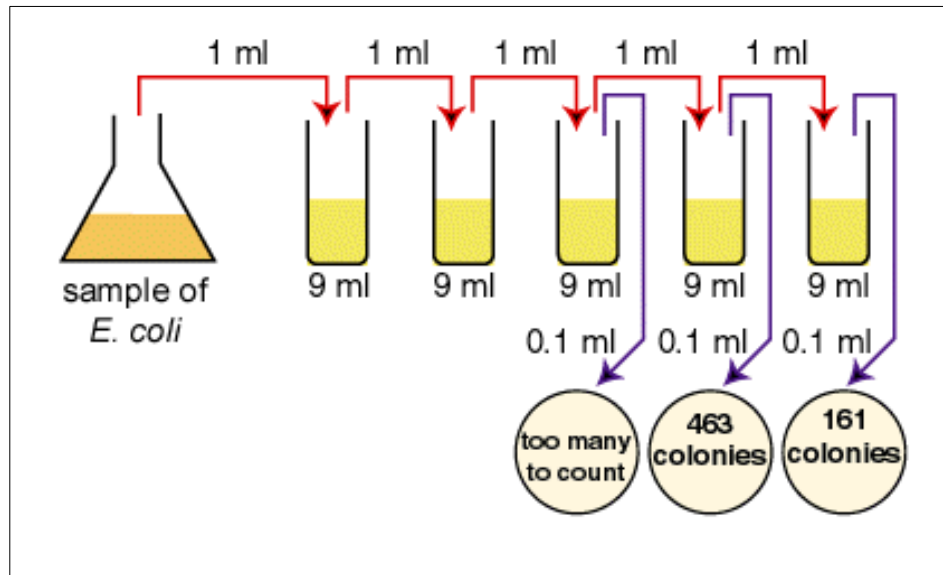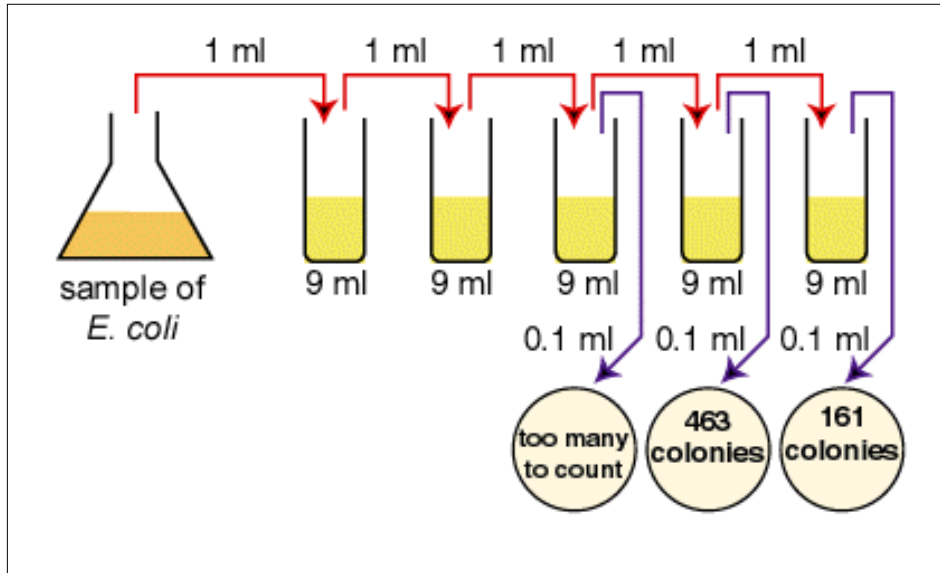1. What is the dilution of the last petri plate?

A. 1/100,000 or 10^{-5}

B. 1/1,000,000 or 10^{-6}

C. 100,000 or 10^5

D. 1,000,000 or 10^6

2. What is the dilution of the 4th test tube?

A. 1/10,000 or 10^{-4}

B. 1/100,000 or 10^{-5}

C. 10,000 or 10^4

D. 100,000 or 10^5

1 ml · 1 ml · 1 ml · 1 ml · 1 ml

sample of
E. coli

9 ml · 9 ml · 9 ml · 9 ml · 9 ml

0.1 ml · 0.1 ml · 0.1 ml

too many to count · 463 colonies · 161 colonies

3. How many bacteria per ml in the original sample?

A. 16,100,000 or 1.65×10^7

B. 161,000,000 or 1.65×10^8

C. 46,300,000 or 4.63×10^7

4. Is this a useful plate to use for the plate count method?

A. Yes, the colonies are well separated.
B. No, there are less than 30 colonies.

5. When measuring absorbance with a Spectrophotometer, _____.

A. the greater the bacterial concentration the lower the absorbance.
B. the greater the bacterial concentration the greater the absorbance.

6. The volume held in a 1 ml pipette from the bottom tip to the "0" is _____.

    A. 1.0 ml
    B. 0.1 ml
    C. 10 ml

7. One ml of *E.coli* is mixed with 1ml of dye. A drop of this dilution is placed on a Petroff-Hausser counting chamber. Five large, double-lined squares, each containing a volume of 1/1,250,000 cc, are counted giving the following results: 61, 74, 78, 63 and 64 bacteria.
How many bacteria are there per cc in the original sample?

  A. 170,000,000 *E. Coli* per cc
  B. 85,000,000 *E. Coli* per cc
  C. 1,700,000,000 *E. Coli* per cc
  D. 850,000,000 *E. Coli* per cc