1. The pooled estimate of the population SD is $\sqrt{\frac{10.67^2 \times 9 + 9.30^2 \times 4}{13}} = 10.27$.

The estimated SE of the difference between the sample means is $10.27 \times \sqrt{\frac{1}{10} + \frac{1}{5}} = 5.62$.

The 97.5 percentile of the t distribution with 13 degrees of freedom is 2.16. (In R, use `qt(0.975,13)`.)

Thus the 95% confidence interval is $(103-67) \pm 2.16 \times 5.62 = 36 \pm 12 = (24, 48)$.

In R, if $x$ is the data for the sample from strain A and $y$ is the data for the sample from strain B, type `t.test(x,y,var.equal=TRUE)` to get the above confidence interval.