

## Answer on Question #45013 – Math - Statistics and Probability

### Problem.

The table below gives the results of a matched-pairs study comparing two different foot creams D and E, for treating tinea pedis (athlete's foot), with each subject given Cream D on one foot, Cream E on the other foot. Is there sufficient evidence showing one cream better than the other?

Treatment with Cream D

Cured	Not Cured
16	17

Treatment with Cream E

Cured	Not Cured
38	14

### Solution.

The cream D has cured  $\frac{16}{16+17} = \frac{16}{33} \approx 48\%$  of patients, while cream E has cured  $\frac{38}{38+14} = \frac{38}{52} \approx 73\%$ . The cream E has cured  $73 - 48 = 25\%$  patients more, so we may say that cream E is better than cream D.