The Case of the Missing Parameters

Will at Manic Mango Games has a problem. He needs to give his boss the mean and standard deviation of the number of minutes people take to complete level one of their new game. This shouldn't be difficult, but unfortunately a ferocious terrier has eaten the piece of paper he wrote them on.

Will only has three clues to help him.

Five Minute

Mystery

First of all, Will knows that the number of minutes people spend playing level one follows a normal distribution.

Secondly, he knows that the probability of a player playing for less than 5 minutes is 0.0045.

Finally, the probability of someone taking less than 15 minutes to complete level one is 0.9641.

How can Will find the mean and standard deviation?