



Normal Distribution

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or

... more meaningful terms such as **Height**, **Weight**, **Earnings** etc.

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Height ~ Normal(mean, std)



Normal Distribution, the NORM.DIST function



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The standard deviation of number of defectives is 9 loaves.

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Predict probability that less than 70 loaves of bread will get discarded on being defective?

Normal Distribution, the NORM.DIST function

Example

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Defective \sim Normal(85, 9)

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It observes that on average every day 85 loaves of bread get discarded on account of being defective.

The standard deviation of number of defectives is 9 loaves.

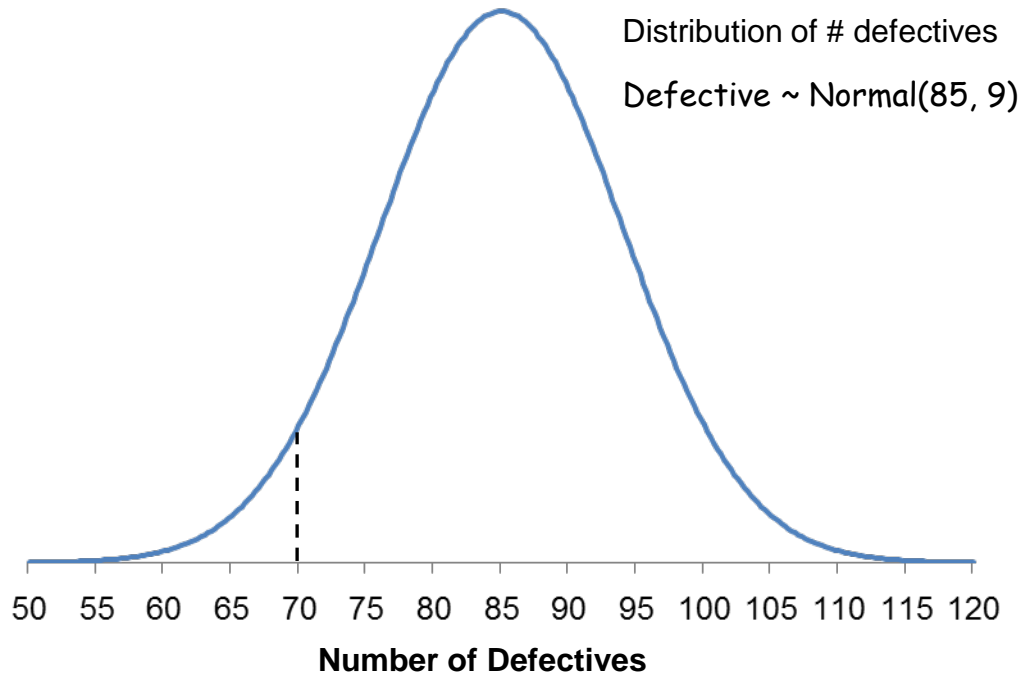
Predict probability that less than 70 loaves of bread will get discarded on being defective?

Defective \sim Normal(85, 9)

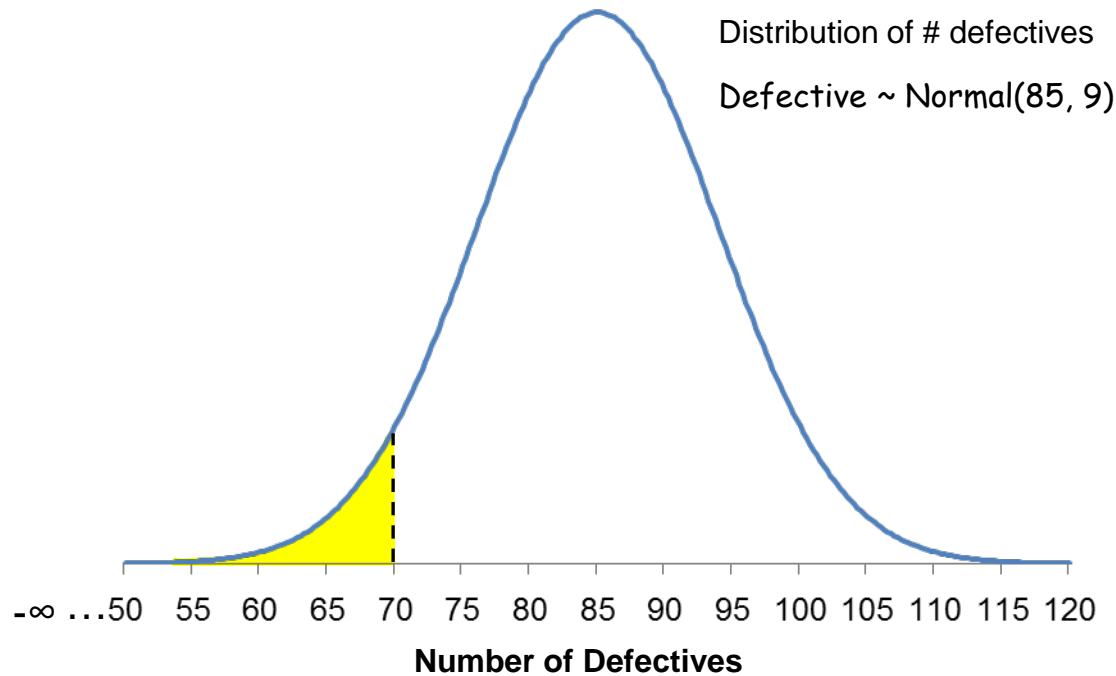
Prob(Defective < 70) = ?



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Syntax:

=NORM.DIST(x, mean, std, TRUE)

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`=NORM.DIST(70, 85, 9, TRUE)`

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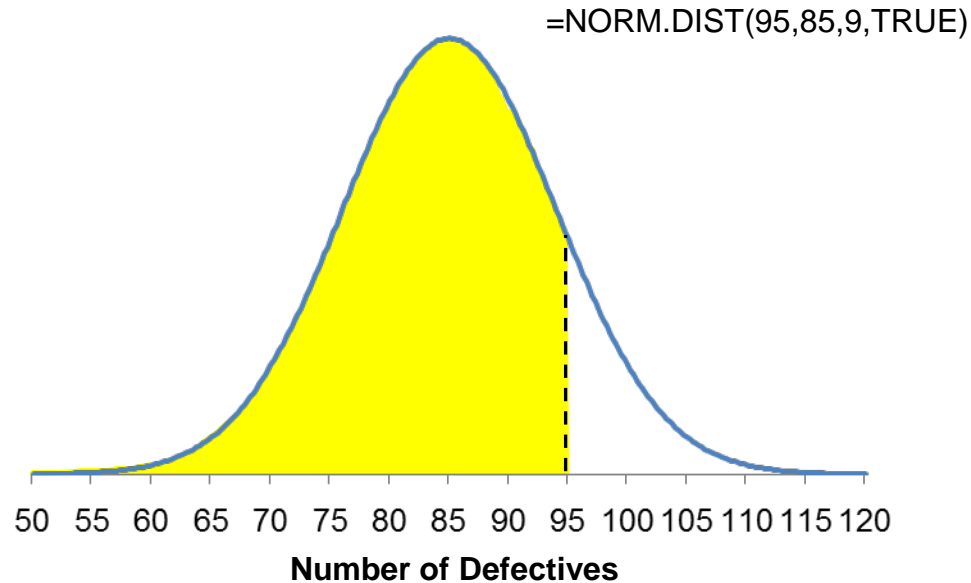


Normal Distribution, the NORM.DIST function

What is the probability that the number of defective loaves produced tomorrow are in excess of 95?

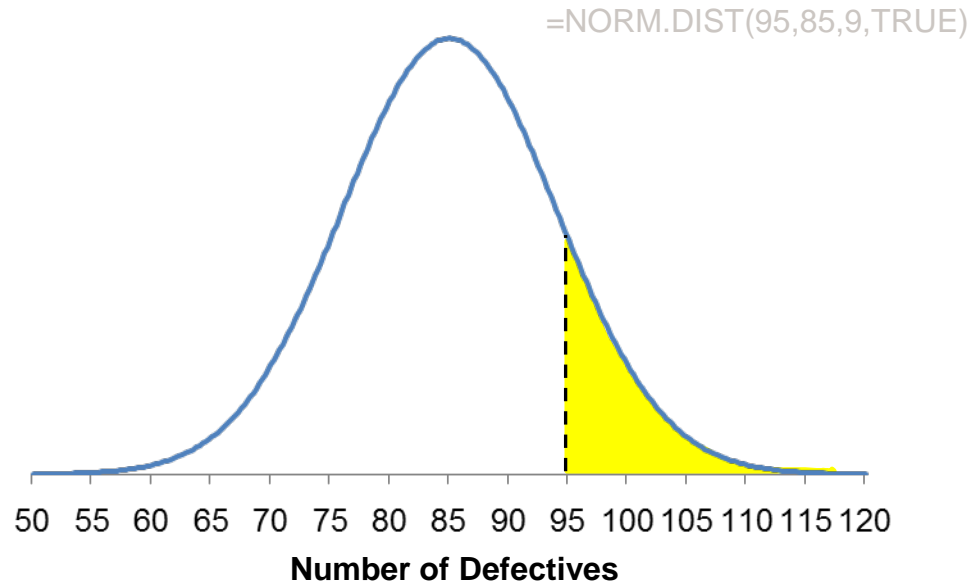
Normal Distribution, the NORM.DIST function

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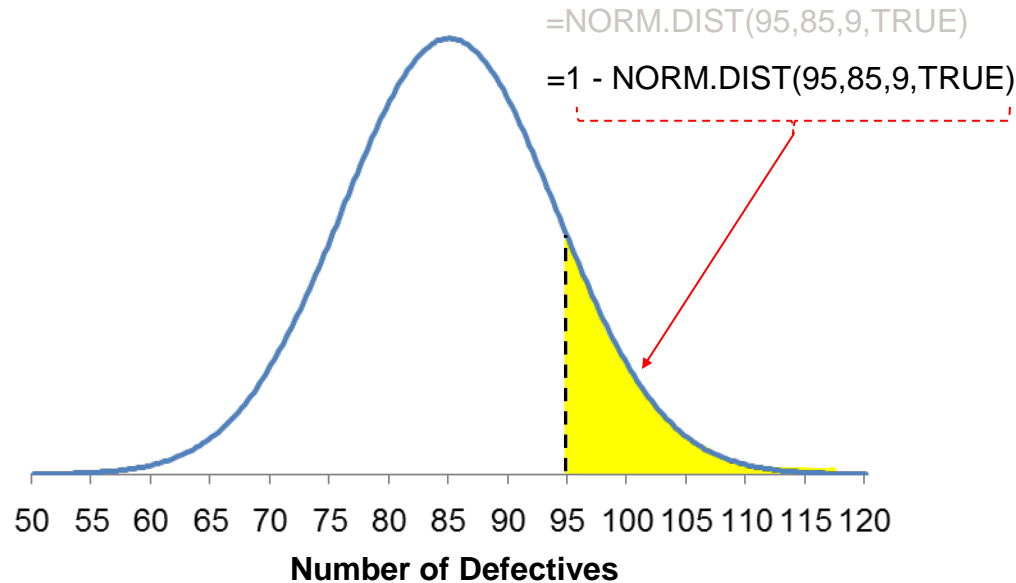
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