Applications of the Normal Distribution

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This number needs to be rounded up to the next integer, giving us an answer of 431 sandwiches to be stocked.

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Another Problem…

John can take either of two roads to the airport from his home (Road A or Road B). Owing to varying traffic conditions the travel times on the two roads are not fixed, rather on a Friday around midday the travel times across these roads can be well approximated per normal distributions as follows,

Road A: mean =54 minutes, std = 3 minutes

Road B: mean =60 minutes, std = 10 minutes

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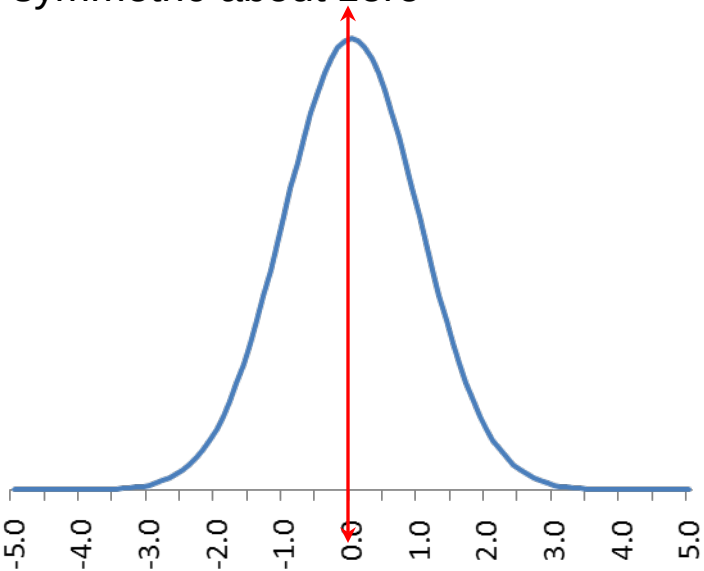
- It is symmetric about zero



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You can convert any normal distribution to standard normal as follows:

Suppose X ~ Normal(*mean*, *std*)

Let Z = (X - *mean*)/*std*

Then Z ~ Normal(0, 1)

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