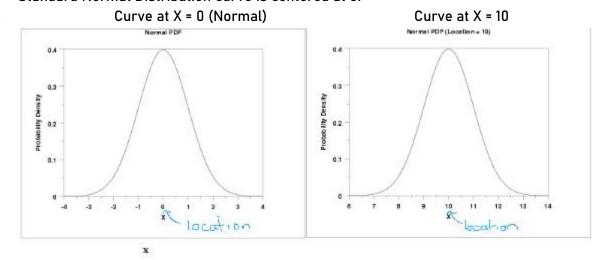
PARAMETERS

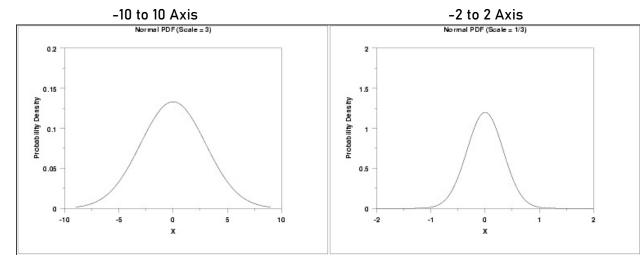
LOCATION PARAMETER

- Location parameter tells us where the graph is located.
- Where on the Horizontal Axis the Graph is centered, relative to the standard normal model.
- Standard Normal Distribution curve is centered at 0.

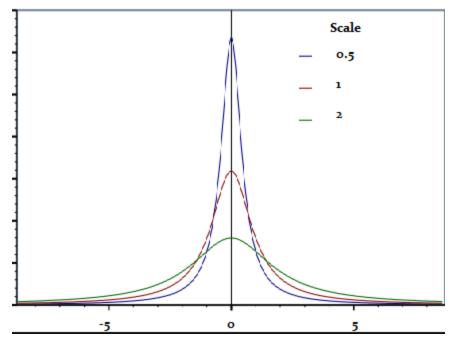


SCALE PARAMETER

- A scale parameter stretches or squeezes a graph.
- They are used with location parameters to determine the shape and location of a distribution.



- Scale parameters give meaning to graphs. In a <u>standard normal model</u>, the scale is equal to the <u>standard deviation</u>, σ. Without a scale on a graph, you can't extract any information from it, even given that the area under the graph is 1

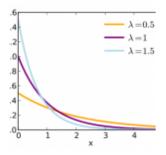


- The above graph shows the effect of parameters. As the graph shrinks horizontally with smaller scales, the graph also grows taller. *Why?* Because the area under the curve must equal 1, all the area must go up if its width shrinks.

SHAPE PARAMETER

- The shape parameter affects the general shape of the distribution.

For example, the **Beta distribution** has a shape parameter. Changing this parameter changes the overall shape of the graph.



The exponential distribution does not have a shape parameter, so the general shape remains the same. Image credit: Skbkekas|Wikimedia

Causana.

Commons

In contrast, several other distributions *do not* have these parameters. They include the exponential distribution. Even though the exponential distribution can be squeezed, stretched, or shifted, the overall shape remains the same.

- The most important thing to grasp about the shape parameter is that it doesn't change where the graph lies on the horizontal axis of a Cartesian plane (that's the job of the location parameter). Nor does it shrink or squeeze the graph (the job of the scale parameter). It just defines the general shape of the graph for certain distributions.

VERIFICATION AND VALIDATION

VERIFICATION

 It is concerned with determining whether the document is correctly translated into the computer program.

VALIDATION

- It is the process of determining whether the simulation model is accurate with the presentation for the object of study.

CREDIBILITY

- Acceptance of model by the institute.

TECHNIQUES

- 1. Step by Step debugging.
 - a. Continuous debugging of small modules while under development, instead of doing all the debugging in the end.
- 2. Multiple Reviewer.
- 3. Trace (Manual Test).
 - a. Computer ke output ko phir khud haath se manually solve krke answer verify kro.
- 4. Different Parameter Setting.
- 5. Animation.
- 6. Verify given data from its output.
- 7. Compare new Mean and Variance to Mean and Variance of historic data.
- 8. Use commercial software.
 - a. Make sure that the software not to latest