

## DAILY ASSESSMENT FORMAT

Date:	29 july	Name:	Poorvi j gowda
Course:	Coursera	USN:	4AL17EC071
Topic:	Basic statistics	Semester & Section:	6 <sup>th</sup> sem 'B' sec
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### FORENOON SESSION DETAILS

Image of session



Coursera for Students | Coursera | Sampling distributions | Coursera

coursera.org/learn/basic-statistics/exam/XQ5Zyl/sampling-distributions/attempt/redirectToCover=true

Sampling distributions  
Graded Quiz • 20 min

Due Aug 16, 11:59 PM PDT

✓ Congratulations! You passed!  
TO PASS: 80% or higher

Keep Learning

GRADE  
100%

### Sampling distributions

LATEST SUBMISSION GRADE  
100%

1. What is the difference between descriptive and inferential statistics? 1 / 1 point

- ☐ Where inferential statistics only concerns the sample, descriptive statistics concerns the underlying population.
- ☒ Where descriptive statistics only concerns the sample, inferential statistics concerns the underlying population.
- ☐ Where inferential statistics is used with discrete variables, descriptive statistics is used with continuous variables.
- ☐ Where descriptive statistics is used with discrete variables, inferential statistics is used with continuous variables.

✓ Correct  
Correct!

mean of random variable ( $X$ )

$=$

$\mu_x$

many observations ( $x$ )

2	1	1
2	1	2

→

expected value of  $x$

$E(x) = \mu_x = 1.5$

0:49 / 4:35

## Random Variable :-

Random Variable  $x$  can take values  $x_1, x_2$  &  $x_3$

↓  
represents  
the concept

↓  
eg. length

↙   ↓   ↘  
represent  
numbers

↓  
e.g

184.4, 184.3, 185.3

## Random Variable

↙  
Discrete



countable number  
of distinct values



e.g

0/1/2/3

↘  
Continuous



Infinite number of  
possible values



e.g

height

Finite number  
of distinct values



e.g

0/1/2/3

Infinite number of  
possible values



e.g

height

2.145

Random variable



Probability distribution



Discrete



Probability mass  
function



Continuous



Probability density  
function

Standard deviation

$$\sigma(x) = \sqrt{\text{Var}(x)}$$