

## About the Course



## Sets and What They're Good For

- ✓ **Reading:** A note about the video lectures in this lesson  
3 min
- ✓ **Video:** Sets - Basics and Vocabulary  
9 min
- ✓ **Video:** Sets - Medical Testing Example  
11 min
- ✓ **Video:** Sets - Venn Diagrams  
7 min
- ✓ **Practice Quiz:** Practice quiz on Sets  
3 questions

## The infinite World of Real Numbers

- ✓ **Reading:** A note about the video lectures in this lesson  
10 min
- ✓ **Video:** Numbers - The

PRACTICE QUIZ • 15 MIN

## Practice quiz on Sets

✓ Submit your assignment

[Try again](#)

✓ Receive grade

TO PASS 75 % or higher

Grade

100%

[View Feedback](#)

We keep your highest score



✓ **Practice Quiz:** Practice quiz on Sets  
3 questions

### The infinite World of Real Numbers

✓ **Reading:** A note about the video lectures in this lesson  
10 min

✓ **Video:** Numbers - The Real Number Line  
9 min

✓ **Video:** Numbers - Less-than and Greater-than  
6 min

✓ **Video:** Numbers - Algebra With Inequalities  
10 min

✓ **Video:** Numbers - Intervals and Interval Notation  
7 min

✓ **Practice Quiz:** Practice quiz on the Number Line, including Inequalities  
8 questions

That Jagged S Symbol

PRACTICE QUIZ • 25 MIN

# Practice quiz on the Number Line, including Inequalities

✓ **Submit your assignment**

Resume

✓ **Receive grade**  
**TO PASS** 75 % or higher

**Grade** [View Feedback](#)  
**100%** We keep your highest score



## That Jagged S Symbol



✓ **Reading:** A note about the video lectures in this lesson  
10 min

✓ **Video:** Sigma Notation - Introduction to Summation  
9 min

✓ **Video:** Sigma Notation - Simplification Rules  
7 min

✓ **Video:** Sigma Notation - Mean and Variance  
12 min

✓ **Practice Quiz:** Practice quiz on Simplification Rules and Sigma Notation  
6 questions

✓ **Quiz:** Graded quiz on Sets, Number Line, Inequalities, Simplification, and Sigma Notation  
13 questions

✓ **Reading:** Feedback  
10 min

PRACTICE QUIZ • 20 MIN

# Practice quiz on Simplification Rules and Sigma Notation

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**  
TO PASS 75 % or higher

Grade

83.33%

We keep your highest score

[View Feedback](#)



## That Jagged S Symbol



✓ **Reading:** A note about the video lectures in this lesson  
10 min

✓ **Video:** Sigma Notation - Introduction to Summation  
9 min

✓ **Video:** Sigma Notation - Simplification Rules  
7 min

✓ **Video:** Sigma Notation - Mean and Variance  
12 min

✓ **Practice Quiz:** Practice quiz on Simplification Rules and Sigma Notation  
6 questions

✓ **Quiz:** Graded quiz on Sets, Number Line, Inequalities, Simplification, and Sigma Notation  
13 questions

✓ **Reading:** Feedback  
10 min

QUIZ • 35 MIN

# Graded quiz on Sets, Number Line, Inequalities, Simplification, and Sigma Notation

✓ **Submit your assignment**

**DUE DATE** May 31, 8:59 AM CEST **ATTEMPTS** 3 every 8 hours

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

Grade

76.92%

[View Feedback](#)

We keep your highest score



## Descartes Was Really Smart

- ✓ **Reading:** A note about the video lectures in this lesson  
3 min
- ✓ **Video:** Cartesian Plane - Plotting Points  
7 min
- ✓ **Video:** Cartesian Plane - Distance Formula  
10 min
- ✓ **Video:** Cartesian Plane - Point-Slope Formula for Lines  
8 min
- ✓ **Video:** Cartesian Plane: Slope-Intercept Formula for Lines  
7 min
- ✓ **Practice Quiz:** Practice quiz on the Cartesian Plane  
5 questions

## Input-Output Machines

PRACTICE QUIZ • 15 MIN

# Practice quiz on the Cartesian Plane

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**  
80%

[View Feedback](#)

We keep your highest score



the video lectures in this lesson  
3 min



✓ **Video:** Functions - Mapping from Sets to Sets  
7 min

✓ **Video:** Functions - Graphing in the Cartesian Plane  
11 min

✓ **Video:** Functions - Increasing and Decreasing Functions  
10 min

✓ **Video:** Functions - Composition and Inverse  
10 min

✓ **Practice Quiz:** Practice quiz on Types of Functions  
6 questions

✓ **Quiz:** Graded quiz on Cartesian Plane and Types of Function  
13 questions

✓ **Reading:** Feedback  
10 min

PRACTICE QUIZ • 20 MIN

# Practice quiz on Types of Functions

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**  
**TO PASS** 75 % or higher

Grade

83.33%

[View Feedback](#)

We keep your highest score



the video lectures in this lesson  
3 min



✓ **Video:** Functions - Mapping from Sets to Sets  
7 min

✓ **Video:** Functions - Graphing in the Cartesian Plane  
11 min

✓ **Video:** Functions - Increasing and Decreasing Functions  
10 min

✓ **Video:** Functions - Composition and Inverse  
10 min

✓ **Practice Quiz:** Practice quiz on Types of Functions  
6 questions

✓ **Quiz:** Graded quiz on Cartesian Plane and Types of Function  
13 questions

✓ **Reading:** Feedback  
10 min

QUIZ • 40 MIN

# Graded quiz on Cartesian Plane and Types of Function

✓ **Submit your assignment**

**DUE DATE** Jun 7, 8:59 AM CEST **ATTEMPTS** 3 every 8 hours

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**

84.61%

[View Feedback](#)

We keep your highest score



**This is about that derivative stuff**

- ✓ **Reading:** A note about the video lectures in this lesson  
10 min
- ✓ **Video:** Tangent Lines - Slope of a Graph at a Point  
10 min
- ✓ **Video:** Tangent Lines - The Derivative Function  
9 min
- ✓ **Practice Quiz:** Practice quiz onTangent Lines to Functions  
2 questions

**Fast Growth, Slow Growth**

PRACTICE QUIZ • 10 MIN

# Practice quiz onTangent Lines to Functions

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**  
**TO PASS** 75 % or higher

**Grade**  
**100%**

[View Feedback](#)

We keep your highest score





Exponents  
7 min



✓ **Video:** Simplification Rules for Algebra using Exponents  
11 min

✓ **Video:** How Logarithms and Exponents are Related  
12 min

✓ **Video:** The Change of Base Formula  
4 min

✓ **Video:** The Rate of Growth of Continuous Processes  
11 min

✓ **Practice Quiz:** Practice quiz on Exponents and Logarithms  
12 questions

✓ **Quiz:** Graded quiz on Tangent Lines to Functions, Exponents and Logarithms  
13 questions

✓ **Reading:** Feedback  
10 min

PRACTICE QUIZ • 40 MIN

# Practice quiz on Exponents and Logarithms

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**  
100%

[View Feedback](#)

We keep your highest score



Exponents  
7 min



✓ **Video:** Simplification Rules for Algebra using Exponents  
11 min

✓ **Video:** How Logarithms and Exponents are Related  
12 min

✓ **Video:** The Change of Base Formula  
4 min

✓ **Video:** The Rate of Growth of Continuous Processes  
11 min

✓ **Practice Quiz:** Practice quiz on Exponents and Logarithms  
12 questions

✓ **Quiz:** Graded quiz on Tangent Lines to Functions, Exponents and Logarithms  
13 questions

✓ **Reading:** Feedback  
10 min

QUIZ • 45 MIN

# Graded quiz on Tangent Lines to Functions, Exponents and Logarithms

✓ **Submit your assignment**

**DUE DATE** Jun 14, 8:59 AM CEST **ATTEMPTS** 3 every 8 hours

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**

92.30%

[View Feedback](#)

We keep your highest score



## Basic Probability Definitions

- ✓ **Reading:** A note about the video lectures in this lesson  
3 min
- ✓ **Video:** Probability Definitions and Notation  
7 min
- ✓ **Video:** Joint Probabilities  
6 min
- ✓ **Practice Quiz:** Practice quiz on Probability Concepts  
9 questions

## Problem Solving Methods

## Applying Bayes Theorem and the Binomial Theorem

PRACTICE QUIZ • 25 MIN

# Practice quiz on Probability Concepts

✓ **Submit your assignment**

[Try again](#)

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**

**100%**

[View Feedback](#)

We keep your highest score



6 min

- ✓ **Practice Quiz:** Practice quiz on Probability Concepts  
9 questions

### Problem Solving Methods

- ✓ **Reading:** A note about the video lectures in this lesson  
3 min
- ✓ **Video:** Permutations and Combinations  
12 min
- ✓ **Video:** Using Factorial and "M choose N"  
6 min
- ✓ **Video:** The Sum Rule, Conditional Probability, and the Product Rule  
8 min
- ✓ **Practice Quiz:** Practice quiz on Problem Solving  
9 questions

### Applying Bayes Theorem and the Binomial Theorem

PRACTICE QUIZ • 25 MIN

## Practice quiz on Problem Solving

- ✓ **Submit your assignment**

[Try again](#)

- ✓ **Receive grade**  
TO PASS 75 % or higher

Grade  
100%

[View Feedback](#)

We keep your highest score



## and the Binomial Theorem



✓ **Reading:** A note about the video lectures in this lesson  
3 min

✓ **Video:** Bayes' Theorem (Part 1)  
10 min

✓ **Video:** Bayes' Theorem (Part 2)  
5 min

▶ **Video:** The Binomial Theorem and Bayes Theorem  
8 min

✓ **Practice Quiz:** Practice quiz on Bayes Theorem and the Binomial Theorem  
9 questions

✓ **Quiz:** Probability (basic and Intermediate) Graded Quiz  
12 questions

✓ **Reading:** Feedback  
10 min

PRACTICE QUIZ • 25 MIN

# Practice quiz on Bayes Theorem and the Binomial Theorem

✓ **Submit your assignment**

Try again

✓ **Receive grade**

**TO PASS** 75 % or higher

**Grade**

100%

View Feedback

We keep your highest score



## and the Binomial Theorem



✓ **Reading:** A note about the video lectures in this lesson  
3 min

✓ **Video:** Bayes' Theorem (Part 1)  
10 min

✓ **Video:** Bayes' Theorem (Part 2)  
5 min

▶ **Video:** The Binomial Theorem and Bayes Theorem  
8 min

✓ **Practice Quiz:** Practice quiz on Bayes Theorem and the Binomial Theorem  
9 questions

✓ **Quiz:** Probability (basic and Intermediate) Graded Quiz  
12 questions

✓ **Reading:** Feedback  
10 min

QUIZ • 50 MIN

# Probability (basic and Intermediate) Graded Quiz

✓ **Submit your assignment**

**DUE DATE** Jun 21, 8:59 AM CEST **ATTEMPTS** 3 every 8 hours

Try again

Retake the quiz in **5h 1m**

✓ **Receive grade**

**TO PASS** 80 % or higher

**Grade**

91.66%

View Feedback

We keep your highest score

