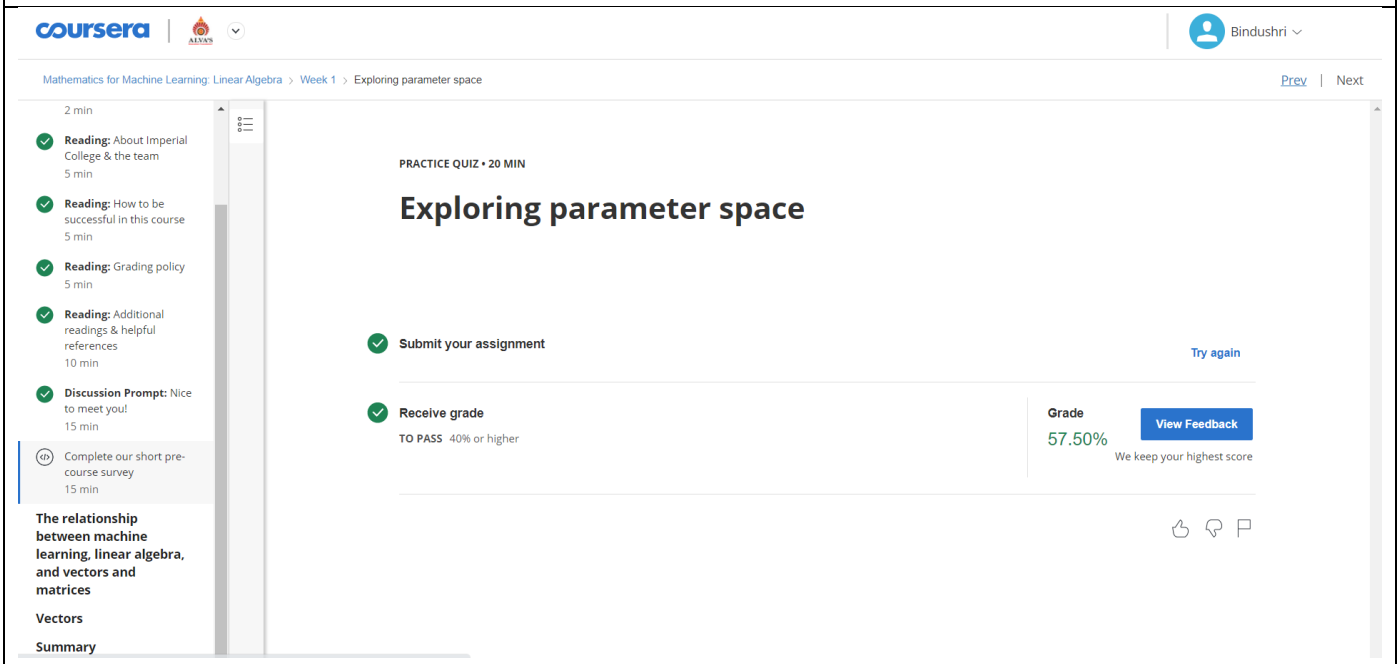
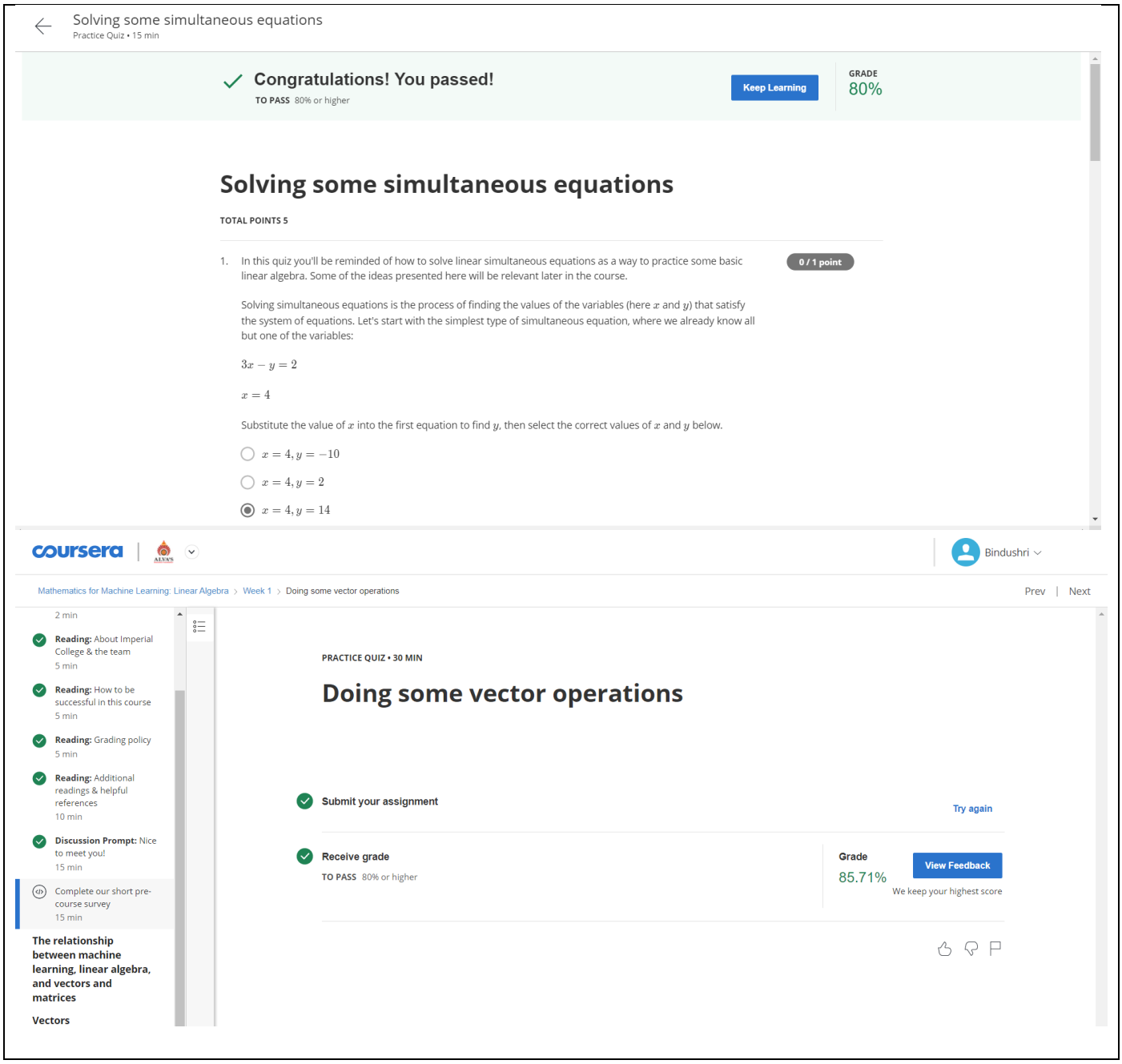
DAILY ASSESSMENT FORMAT

Date:	**10-07-2020**	**Name:**	**BINDUSHRI**
Course:	**coursera**	**USN:**	**4AL17EC011**
Topic:	**Mathematics for machine learning:linear algebra-weak1**		**6th A**
Github Repository:	**Bindushri**		

FORENOON SESSION DETAILS




Solving some simultaneous equations
Practice Quiz • 15 min
Congratulations! You passed!
TO PASS 80% or higher
Keep Learning
GRADE
80%
Solving some simultaneous equations
TOTAL POINTS 5
1. In this quiz you'll be reminded of how to solve linear simultaneous equations as a way to practice some basic linear algebra. Some of the ideas presented here will be relevant later in the course.
0 / 1 point
Solving simultaneous equations is the process of finding the values of the variables (here x and y) that satisfy the system of equations. Let's start with the simplest type of simultaneous equation, where we already know all but one of the variables:
$3x - y = 2$
$x = 4$
Substitute the value of x into the first equation to find y, then select the correct values of x and y below.
$x = 4, y = -10$
$x = 4, y = 2$
$x = 4, y = 14$

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Mathematics for Machine Learning: Linear Algebra › Week 1 › Doing some vector operations
Prev | Next
2 min
Reading: About Imperial College & the team
5 min
Reading: How to be successful in this course
5 min
Reading: Grading policy
5 min
Reading: Additional readings & helpful references
10 min
Discussion Prompt: Nice to meet you!
15 min
Complete our short pre-course survey
15 min
The relationship between machine learning, linear algebra, and vectors and matrices
Vectors
PRACTICE QUIZ • 30 MIN
Doing some vector operations
Submit your assignment
Try again
Receive grade
TO PASS 80% or higher
Grade
85.71%
View Feedback
We keep your highest score

10/07/2020 - Week-1 - module-1

Mathematics for Machine Learning : Linear Algebra

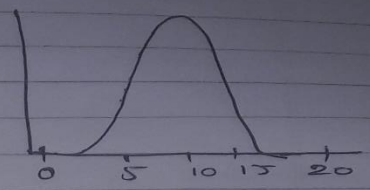
→ Solving data science challenges with Mathematics

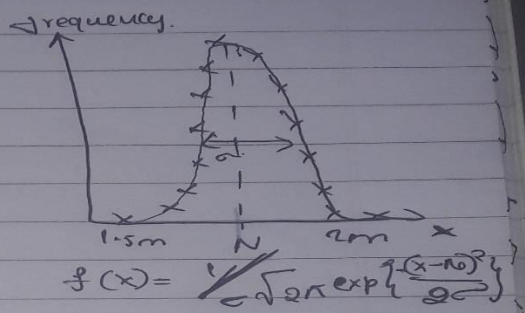
Motivations for linear algebra.

$2a + 3b = 8$

$10a + 1b = 13$

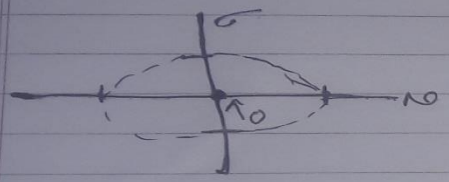
$\begin{pmatrix} 2 & 3 \\ 10 & 1 \end{pmatrix} \begin{bmatrix} a \\ b \end{bmatrix} = \begin{bmatrix} 8 \\ 13 \end{bmatrix}$





Getting handle on vector.

→ linear algebra.



→ $3x - y = 2$

$x = 4$

$3 \times 4 - y = 2$

$12 - y = 2.$

$12 - 2 = y.$

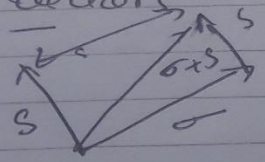
10

$3x - 2y = 7$

$2x - 2y = 2.$

$\begin{bmatrix} 3 & -2 \\ 2 & -2 \end{bmatrix} \begin{bmatrix} x \\ y \end{bmatrix} = \begin{bmatrix} 7 \\ 2 \end{bmatrix}$

Operation with vectors



$2r = \begin{bmatrix} 2 \times 3 \\ 2 \times 2 \end{bmatrix} = \begin{bmatrix} 6 \\ 4 \end{bmatrix}$ 2r

$\begin{bmatrix} 3 \\ -2 \end{bmatrix} = r.$