

# MATLAB Grader

Create interactive course problems and automatically grade MATLAB code in any learning environment.

## Autograded Student Solutions with Custom Scoring Rubrics

- Options for both pass/fail and weighted grading
- Ability to choose from standard assessment types or write your own assessments in MATLAB code
- Students receive real-time, contextual feedback on their solutions

```

Solution 1: 4 of 5 tests passed (80%)
Submitted on 20 Nov 2018 | ID: 10161219 | Size: 63
Test Results
1 syms g x; % insert variable
2 gpiecewise(x<=0, x^2, 0<x<1, x, x==1, 1+x^2); % insert conditions and values
3
4 % evaluate the function at different points a=g(-2); b=g(0.5); c=g(2)
5 ans=subs(g, x, -2)
6 b=subs(g, x, 0.5)
7 c=subs(g, x, 2)
    
```

Fix This Solution My Solutions

Assessment: 4 of 5 Tests Passed (80%)

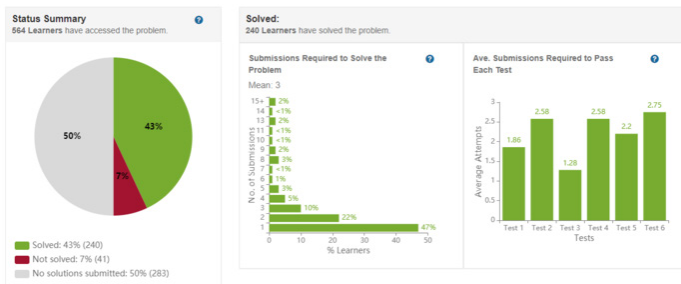
test g 0% (20%)

## Individual and Aggregate Student Performance Analytics

- Solution maps show size, time of arrival, and distance from the reference solution
- Includes a complete history of student's attempts to find the correct solution
- Student outcomes are available to instructors and authorized teaching assistants

< Back to Problem

Learner Status Learner Solutions



## A Library of Reusable Example Courses and Problems

- Templates of common assessment types for both script and function-based problems

- Examples include advanced assessment scenarios such as randomized input parameters and evaluation of plots
- Ability to add examples to your existing course with a single click, and modify them to match your topic

< Back to Add Problem | Introduction to Programming

Close x

111 problems

> Introduction

> Matrices and Operators

> Input/Output

> Flow Control

What does Copy do?



Check if random number in range (if-else)

Code has been provided to define a function named `numberChecker` that

Copy

## Other Features

- A browser-based authoring environment—nothing to install or maintain
- Creation and sharing of MATLAB based assignments
- Rich text, images, hyperlinks, and LaTeX equations in problem descriptions
- A responsive layout for use beyond desktops for all users
- Optional LMS integration to bring autograding into any learning environment. MATLAB Grader is IMS certified.
- MATLAB Grader complies with privacy laws, GDPR, and Privacy Shield

## Getting Started

Students, have you been invited to a course by your instructor?

Click the link in the email you received and log in with your MathWorks account—no download required to get started.

Start using MATLAB Grader for free.

Log in today to create your course at <https://grader.mathworks.com>.

Unlock additional features by associating your account with a Campus-Wide License:

<https://www.mathworks.com/licensecenter/licenses/add>

MATLAB Grader Feature		Free with a MathWorks Account and MATLAB License	Requires a Campus-Wide License
<b>Autograding</b>	Automated grading and real-time student feedback.	✓	✓
<b>Example Problems</b>	Sample assessments that showcase autograding features.	✓	✓
<b>Gradebook</b>	Student outcome reports and the results of autograding by class.	✓	✓
<b>Invite Students</b>	Ability to invite students to take part in courses authored by faculty.	✓	✓
<b>Invite Instructors</b>	Instructors can collaborate with other instructors.	✓	✓
<b>Content Authoring</b>	Course content and problems are stored in a content repository.	✓	✓
<b>Data Export</b>	Student outcomes can be exported from MATLAB Grader.	✓	✓
<b>Learning Analytics</b>	Ability to visualize student outcomes data.	Limited to common reports, solution maps, and student grades.	✓
<b>Problem Catalog</b>	Robust catalog of problems covering multiple academic disciplines.	Limited to 111 problems covering Introduction to Programming concepts and 10 example problems each for concepts in topics such as Calculus, Numerical methods etc.	✓
<b>LMS Integration</b>	Standards-based, IMS-certified integration with learning management systems.	Not available.	✓

*“The fact that you can get immediate feedback (or confirmation) on a quite complicated piece of code is really neat, and without it, debugging your own code would really be a mess. It also motivated me to get 100% score on all the MATLAB assignments.”*

— Juoost P., Virginia Tech student

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[imscert.org](http://imscert.org)

## Contact

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