WeBWorK

How to Use WeBWorK

- Go to http://webwork.cit.jmu.edu
- Click on the link for your course.
- Login using the same log-in information as you use for Canvas and myMadison.
- Solve each problem, enter your answer, and click "Submit answer."
- If the system says your answer is correct for each part of the problem, then you have received full credit for the problem.
- You can try each problem an unlimited number of times before the deadline unless otherwise stated in the specific problem.
- Some problems give you the option to generate a new version of the problem after you have solved the original version. This is a good way to obtain extra practice. You are only required to correctly solve one version of each problem, and you will **NOT** earn additional credit for solving additional versions.
- After the due date, you can return to the WeBWorK site to view the answers and solutions to the problems.

General Tips for Success on WeBWorK

- Start working on the assignment early; you will then have plenty of time to fix problems before the assignment is due.
- You are allowed unlimited attempts on most problems before the due date. If you find that you have tried a problem several times and haven't gotten it correct, you should ask for help from the instructor or a classmate. WeBWorK will help you discover areas where you need help, but it is up to you to get the help. If you start early enough, you'll have time to get help before the deadline. If you are stuck, do not simply plug in answers until you get the right one. This is incredibly inefficient. Instead, have someone help you understand how to do the problem or help you find your mistake.
- Use the Preview Answers button to see how WeBWorK is interpreting your answer. This will help you detect errors in syntax or with parentheses.
- As you work a problem, do not round in intermediate steps. For your final answer, either enter the exact answer and let WeBWorK do the arithmetic or enter a large number of decimal places of your answer.
- Most students find it helpful to work the problems on paper before they enter their answers. You can download a PDF of the problems in the assignment. Many students find that it is easier to enter answers in small batches as you solve the problems instead of waiting until you've finished the entire problem set.
- If you seek help on WeBWorK you should bring a PDF copy of the assignment with you. Your instructor will appreciate it.

(See the other side of this sheet for a list of symbols and functions that are available to you as you enter your answers in WeBWorK.)

What You Want	How to Enter It	Example(s)
Addition	+	2+5
Subtraction	-	3-4
Multiplication	*	2*7, 2*x=2x
Division	/	13/4
Powers	$\wedge$ or **	$2 \wedge 3 = 2{**}3$
Set of values	{ }	{ 1, -1 }
Point in the (x, y) plane	()	(1, 0)
∞	inf or infinity	[7, inf), (-12, infinity)
$-\infty$	-inf or -infinity	(-inf, 77), (-infinity, 25]
Intervals	( ), [ ], [ ), or ( ]	[0, inf)
Union	U	(-5, 3] U (7, 14)
Set subtraction	$-$	[-1, 1] $-$ { 0 }
The set of real numbers	R	R $-$ [0, inf)
$|a|$	abs(a)	abs(-5)=$|-5|$=5
$\sqrt{a}$	sqrt(a) or a$\wedge$(1/2)	sqrt(7)=$\sqrt{7}$
π	pi	
$e \approx 2.718281828459$	e	

- Use angle brackets and commas to input vectors.

  - $< 1, 2, \text{pi} >$ represents the row vector $[1, 2, \pi]$ or the column vector $\begin{bmatrix} 1 \\ 2 \\ \pi \end{bmatrix}$

- Use square brackets and commas to input matrices row by row. Put a pair of square brackets around each row. Then use commas to separate the rows. Finally put another pair of square brackets around all the rows.

  - Enter the matrix $\begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \end{bmatrix}$ as $[[1, 2, 3], [4, 5, 6]]$

Available Functions

- abs( ) - The absolute value
- cos( ) - Cosine (uses radian measure)
- sin( ) - Sine (uses radian measure)
- tan( ) - Tangent (uses radian measure)
- sec( ) - Secant (uses radian measure)
- exp( ) - Exponential - exp(x)= e$\wedge$x

- log( )=ln( ) - The natural log
- logten( ) - The log base 10
- arcsin( )= asin( ) - Arcsine
- arccos( )=acos( ) - Arccosine
- arctan( )=atan( ) - Arctangent
- sqrt( ) - Square root

A Few Tips for Entering Answers:
- Be careful entering expressions and use parentheses like you would on a calculator.
- Pay attention to order of operations. For example, $2/4+5 = 5.5$, $2/(4+5) = 2/9$, $2/3{*}4=8/3$, and $2/(3{*}4)=2/12$.
- Be careful when entering functions. It is good practice to always use parentheses. Examples: abs(-3x), sin(t).
- Use the preview button to see how WeBWorK is interpreting your answer.