BCC WEBWORK GUIDE FOR STUDENTS

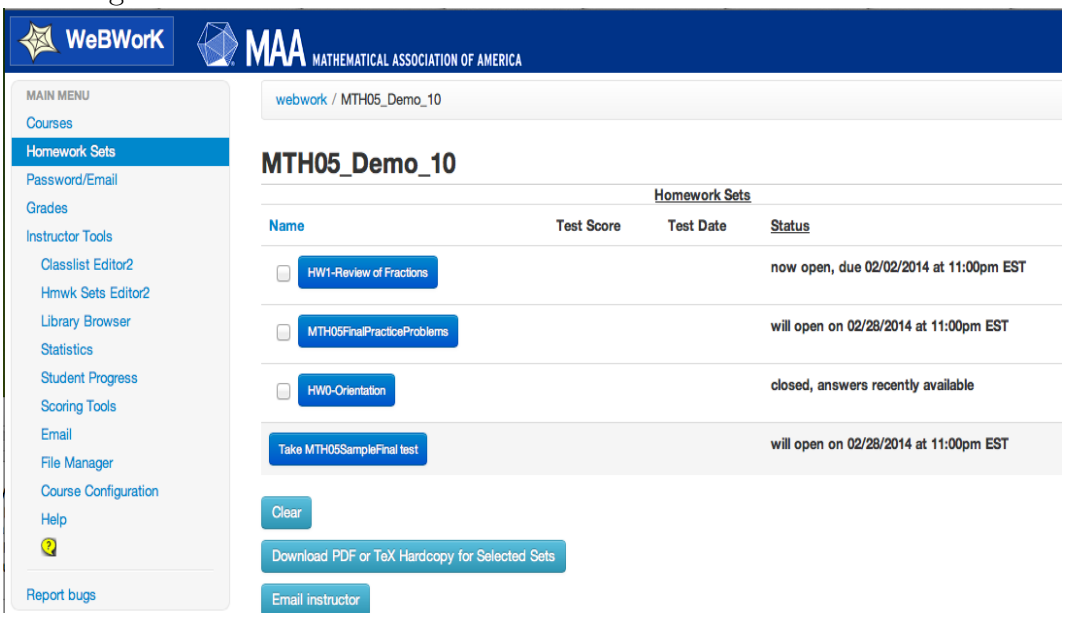
DEPARTMENT OF MATH AND COMPUTER SCIENCE

1. How to Use Webwork to do HW

(1) Find a computer with Internet access. If you do not have computer with internet access, you can find one on campus. There are 16 computer labs located throughout the campus which are equipped with networked microcomputers. All of the labs have Internet access. Check out the appendix for the computer lab locations.

(2) Log into WeBWorK:
- Open a browser and input the URL: http://wwm01.bcc.cuny.edu/webwork2
- Find your course (by course number and your professor's name) and click on it – Be careful – your professor may have two different classes or sections so please make sure to click on the right one. Bookmark it or save the URL somewhere. Google "How to bookmark URLs" if you do not know how.
- Your username is your BCC OSSES ID. It is the part of your BCC email address that comes before '@stu.bcc.cuny.edu' and is usually your first name and dot followed by your last name. This is not necessarily the username you use to sign into CUNYFirst! For example, if your e-mail is "fstname.lstname@stu.bcc.cuny.edu", your username for WebWork is "fstname.lstname". *All letters in the username should be in lower-case.* If you have numbers in your email address, they should be included too. For example if your email is "amy.smith01@stu.bcc.cuny.edu", then your username is "amy.smith01" Your password is your BCC OSSES password. If you do not have a BCC account, you can visit the Helpdesk in Colston Hall room 806 to obtain a user account and password. Please do not change password through Webwork!
- Enter your login name and password. If your login is not correct, you will be told so, and you can try to log in again – If your login doesn't work, talk to your instructor.

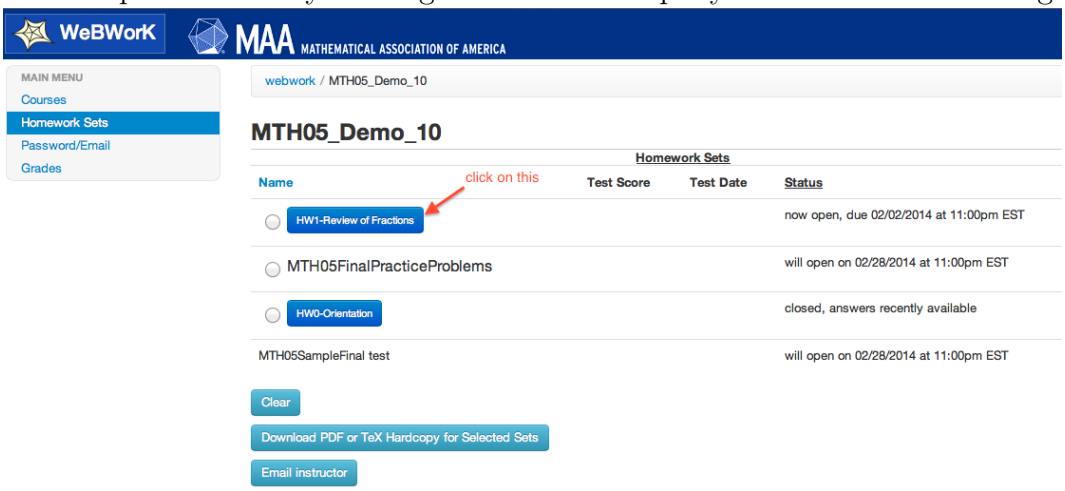
(3) After you log into WeBWorK you will get to the main page, which looks similar to the following:



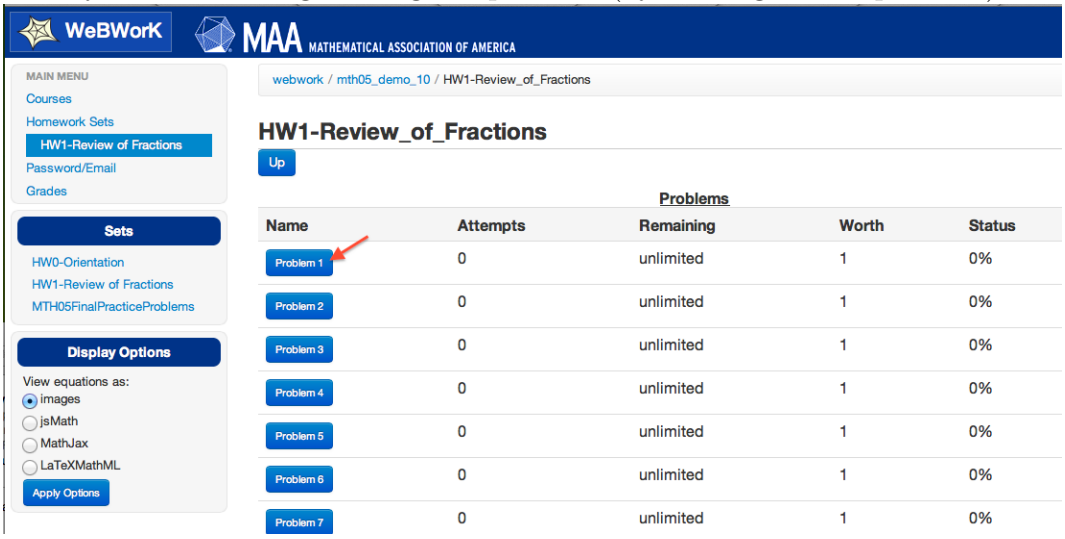
The problem sets will be labeled OPEN or CLOSED. OPEN means you can work on the set and it can count towards your grade. CLOSED means that the set is not open and

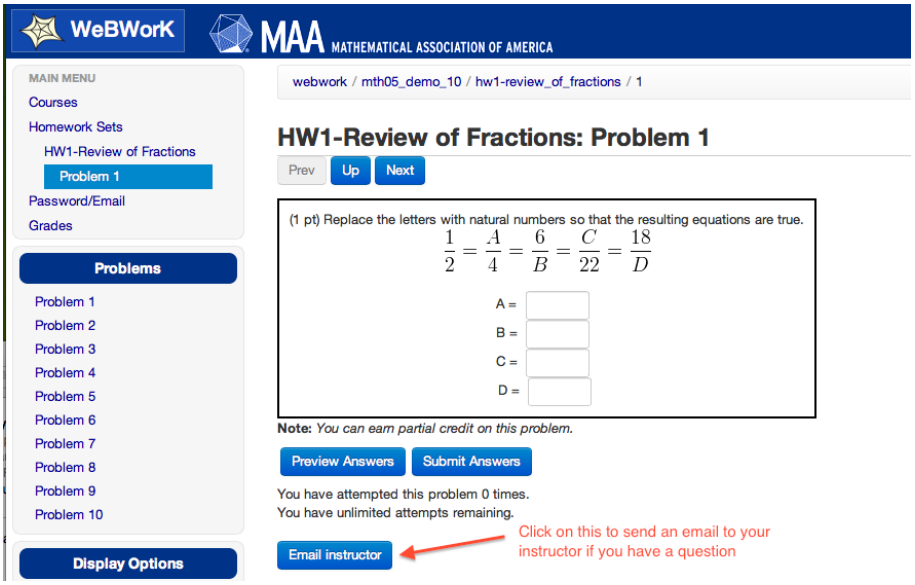
you can not work on it. If the problem set is past the due date, you should be able to click on the problem set and view the solutions.

(4) Select a problem set by clicking on it. For example you will see the following:

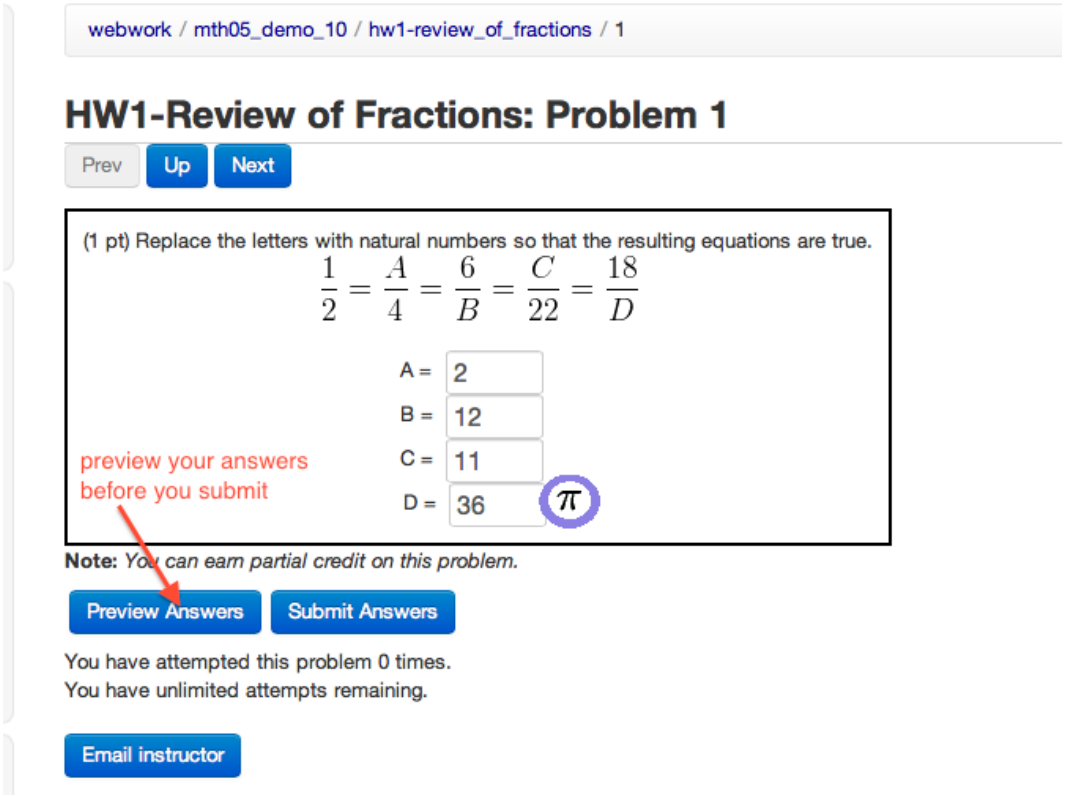


(5) Then you can now begin doing the problem (by clicking on the problem).

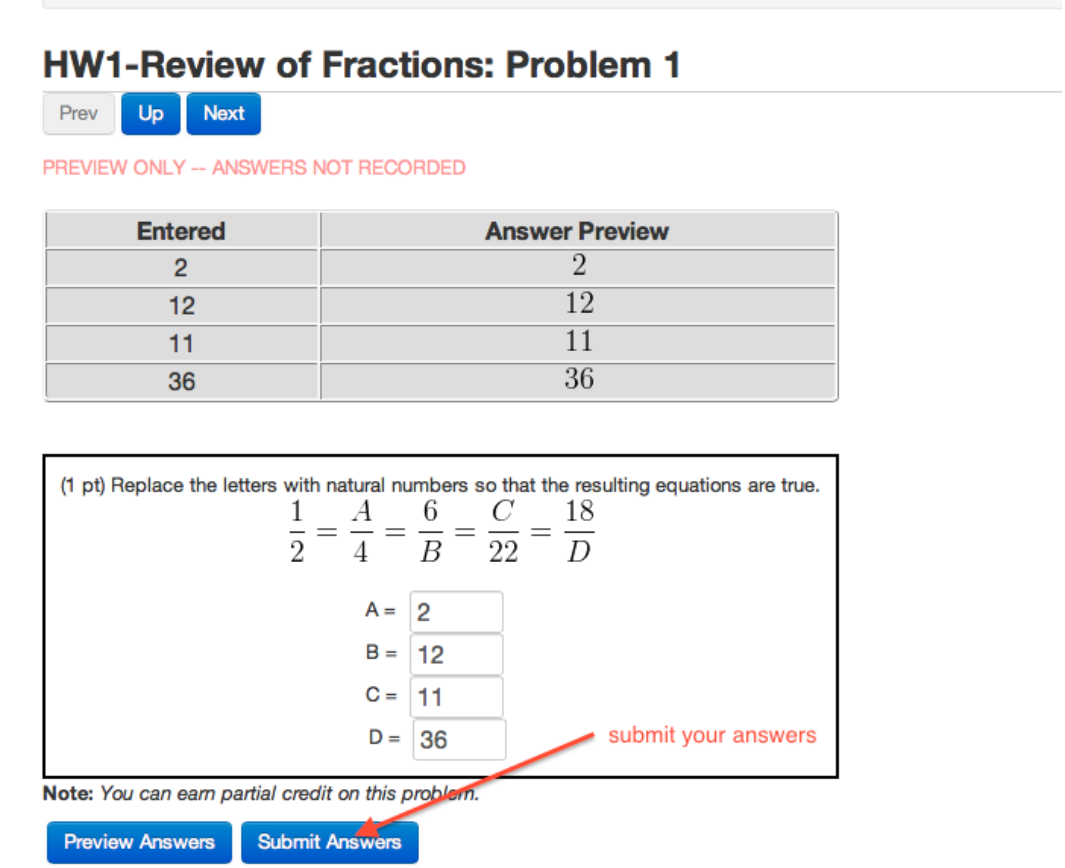




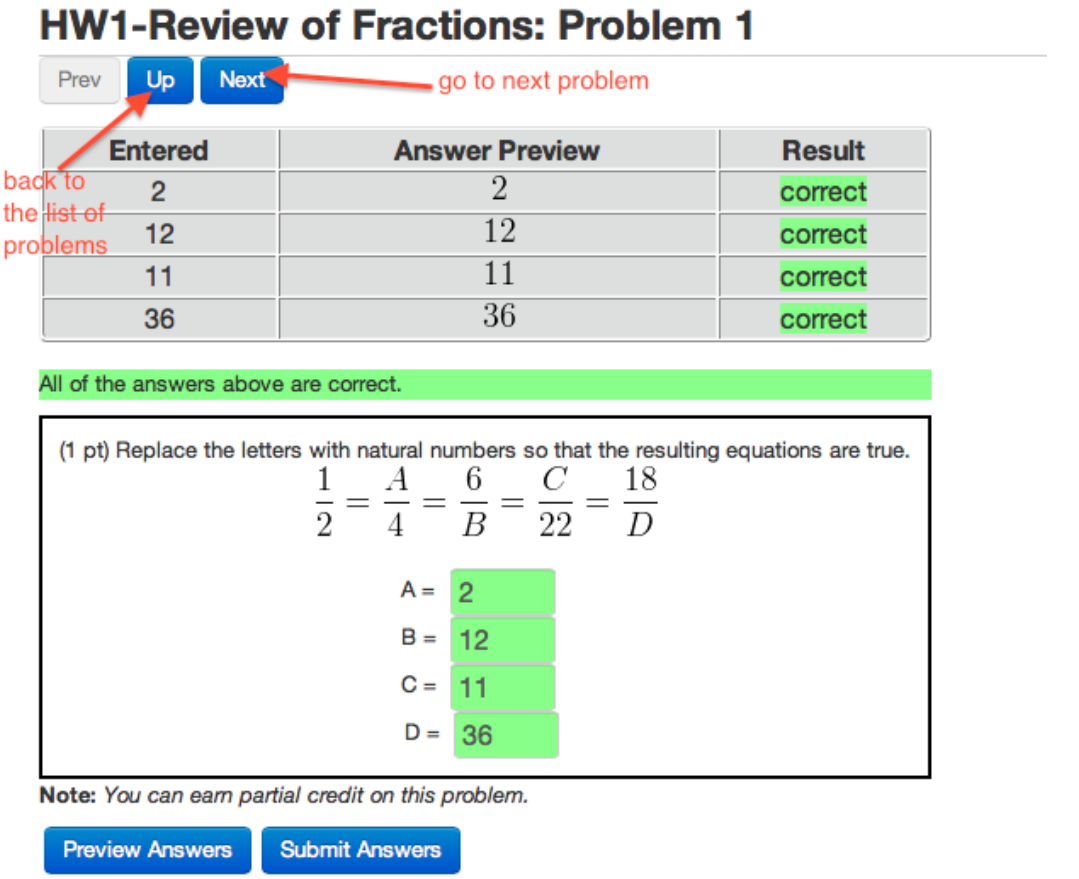
Work out the problem, input your answers (refer to "How to Enter Answers in Webwork" in the appendix), you can preview your answers:



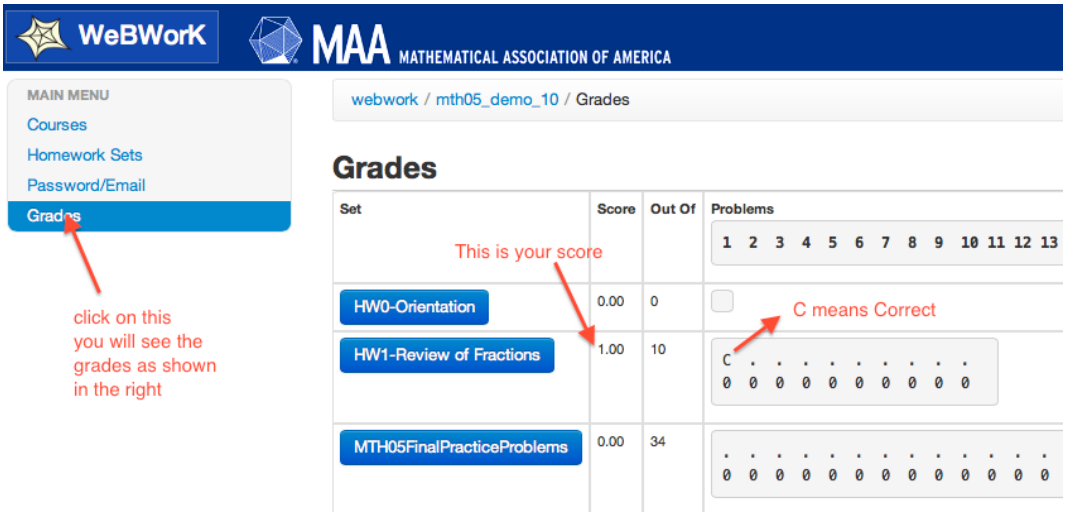
After you onfirm with your answers, you can submit them for grading:



After you submit your answers, you will see if it is correct or not right away. Now you can fix the problem if there is any mistake and repeat the above steps. You can also move to the next problem or get back to the problem list:

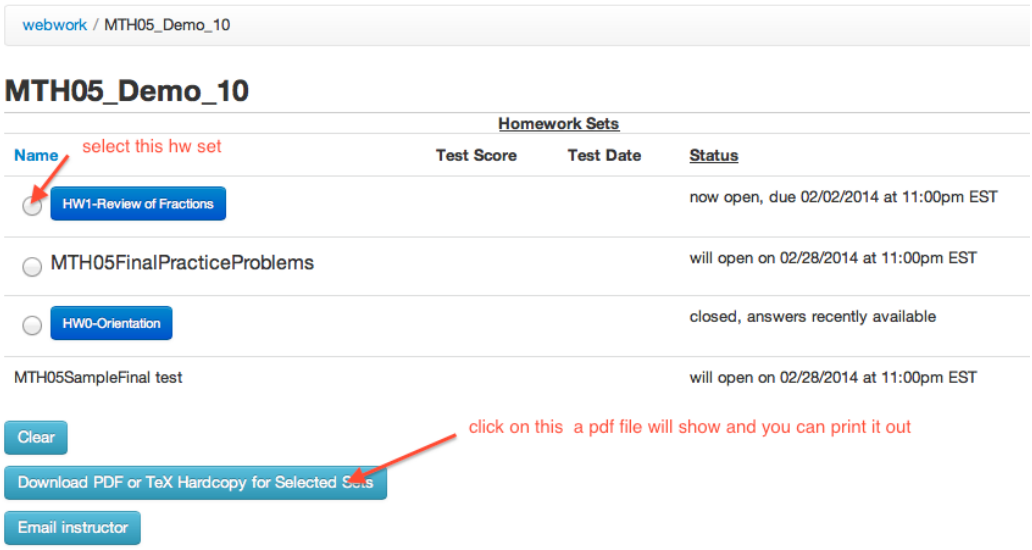


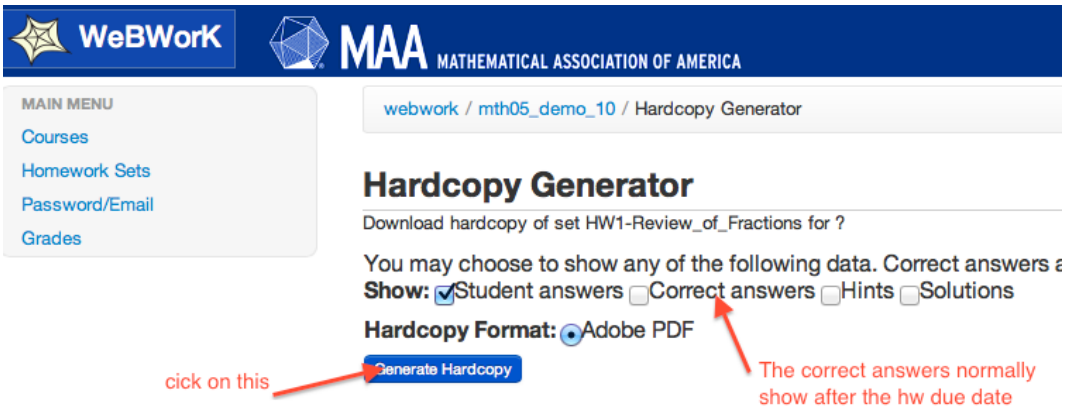
You now can see you scores by click on "Grades" in the menu on the left.

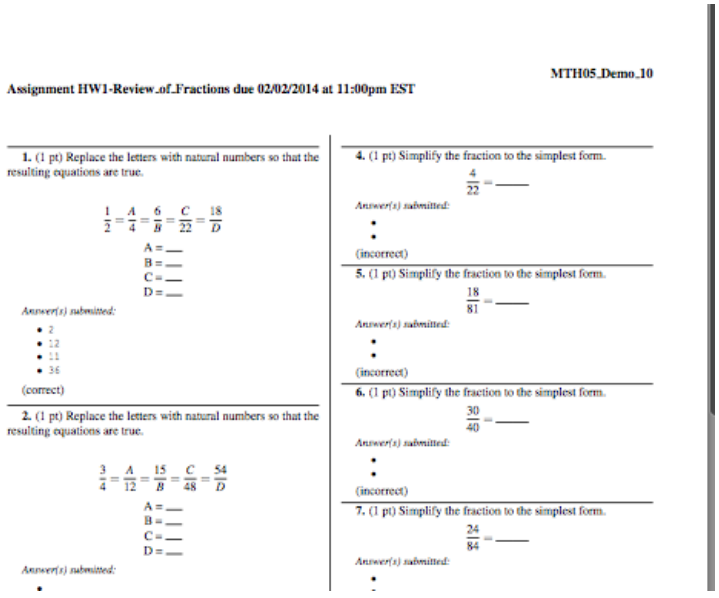


After you submit your homework, you do not need to email your instructor this info. Webwork will keep track of your score. Correct answers will be released after the due date. Please note that as a security measure, if you are logged on to WeBWorK for longer than 30 minutes without any activity, you will be asked to log in again. Your previous work will be saved. Note that "Download a hardcopy of this problem set." is also an option – you may download the hardcopy, print it out and come back to input answers on WebWork –

as shown in the following pictures.







MTH05_Demo_10

Assignment HW1-Review_of_Fractions due 02/02/2014 at 11:00pm EST

1. (1 pt) Replace the letters with natural numbers so that the resulting equations are true.

$$\frac{1}{2} = \frac{A}{4} = \frac{6}{B} = \frac{C}{22} = \frac{18}{D}$$

A = ___
B = ___
C = ___
D = ___

Answer(s) submitted:

- 2
- 12
- 11
- 36

(correct)

2. (1 pt) Replace the letters with natural numbers so that the resulting equations are true.

$$\frac{3}{4} = \frac{A}{12} = \frac{15}{B} = \frac{C}{48} = \frac{54}{D}$$

A = ___
B = ___
C = ___
D = ___

Answer(s) submitted:

4. (1 pt) Simplify the fraction to the simplest form.

$\frac{4}{22} =$ ____

Answer(s) submitted:

(incorrect)

5. (1 pt) Simplify the fraction to the simplest form.

$\frac{18}{81} =$ ____

Answer(s) submitted:

(incorrect)

6. (1 pt) Simplify the fraction to the simplest form.

$\frac{30}{40} =$ ____

Answer(s) submitted:

(incorrect)

7. (1 pt) Simplify the fraction to the simplest form.

$\frac{24}{84} =$ ____

Answer(s) submitted:

2. What to do if you have problems with WeBWorK:

- If you have a problem logging in, check whether your bcc account password has expired and contact the Helpdesk at Colston 806.
- If you have questions on specific homework problems or if you have comments about WeBWorK that you think can help us make WeBWorK better, click on the 'Email Instructor' button 

on any of the pages of WeBWorK.

How to Enter Answers in WeBWorK

Addition	+	a+b gives $a+b$
Subtraction	-	a-b gives $a-b$
Multiplication	*	a*b gives ab

Multiplication may also be indicated by a space or juxtaposition, such as 2x, 2 x, 2*x, or 2(x+y).

Division	/	a/b gives $\frac{a}{b}$
Exponents	^ or **	a^b gives a^b as does a**b
Parentheses, brackets, etc		(...), [...], {...}

Syntax for entering expressions

- Be careful entering expressions just as you would be careful entering expressions in a calculator.
- Sometimes using the * symbol to indicate multiplication makes things easier to read. For example (1+2)*(3+4) and (1+2)(3+4) are both valid. So are 3*4 and 3 4 (3 space 4, not 34) but using an explicit multiplication symbol makes things clearer.
- Use parentheses (), brackets [], and curly braces {} to make your meaning clear.
- Do not enter 2/4+5 (which is 5 ½) when you really want 2/(4+5) (which is 2/9).
- Do not enter 2/3*4 (which is 8/3) when you really want 2/(3*4) (which is 2/12).
- Entering big quotients with square brackets, **e.g**. [1+2+3+4]/[5+6+7+8], is a good practice.
- Be careful when entering functions. It is always good practice to use parentheses when entering functions. Write sin(t) instead of sint or sin t. WeBWorK has been programmed to accept sin t or even sint to mean sin(*t*). But sin 2t is really sin(2)t, i.e. (sin(2))*t. Be careful.
- Be careful entering powers of trigonometric, and other, functions. You write (sin(t))^2 for the square of sin(*t*), and *never* sin^2t.
- For example for the expression $2+3\sin^2(4x)$, 2+3sin^2(4x) is wrong. You should enter: 2+3*(sin(4*x))^2. Why does the last expression work?

Please Excuse My Dear Aunt Sally

Operations in parentheses are always done first (4*x) and then (sin(4*x))], next all exponents are taken, giving (sin(4*x))^2, next all multiplications and divisions are performed, giving 3*(sin(4*x))^2. Finally, all additions and subtractions are performed, giving 2+3*(sin(4*x))^2.

- Remember that multiplication and division have the same precedence and there are no universal rules as to which should be done first in the **absence** of parentheses. WeBWorK

and many computers read things from left to right, so 2/3*4 means (2/3)*4=8/3. But some other computers will read 2/3*4 as 2/(3*4)=1/6. The same lack of consistent rules concerns powers, expressions like 2^3^4.

The only way to insure that you are entering what you want to enter is the use of parentheses!!!

- Use the Preview Button to see exactly how your entry appears to the system. For example, to tell the difference between 1+2/3+4 and [1+2]/[3+4] click the Preview Button.
- If a problem calls for a decimal answer, give at least four decimal digits, or as many as the problem specifies. For example, write 2.3453 instead of 2.34.

Intervals in WeBWorK

What is the domain of $f(x)=\sqrt{x}$? One answer is x>=0 (x is greater than or equal to 0). The best way to enter this in WeBWorK is by using interval notation: [0,infinity).

Other intervals:

(2,3] is the set $2<x\leq 3$.

(-infinity,5) is the set $x<5$.

(-infinity, infinity) is the set of all real numbers.

(2,3]U[4,5) is the set $\{2<x\leq 3 \text{ or } 4\leq x<5\}$. (This is a union of two intervals and can be very important.)

Mathematical Constants Available In WeBWorK

pi This gives $\pi \approx 3.14159265358979$. So cos(pi) is –1.

e This gives $e \approx 2.718281828459045$. So, ln(e*2) is 1 + ln(2)

Scientific Notation Available In WeBWorK

2.1E2 gives 210

2.1E-2 gives 0.021

aEb gives $a\times 10^b$

Cube roots and *n*th Roots

x^(1/3) gives $\sqrt[3]{x}$, the cube root of x

x^(1/n) gives $\sqrt[n]{x}$, the nth root of x

x^(p/q) gives $\left(\sqrt[q]{x}\right)^p$

Mathematical Functions Available In WeBWorK

abs( ) $|x|$, the absolute value

cos( ) the cosine function. Note: the cosine function uses radian measure

sin( ) the sine function. Note: the sine function uses radian measure

tan( ) the tangent function. Note: the tangent function uses radian measure

sec( ) the secant function. Note: the secant function uses radian measure and

$$\sec(x) = \frac{1}{\cos(x)}$$

exp( ) the exponential function, e^x

log( ) The natural logarithm function. Note that this is NOT the common log function from pre-calculus.

ln( ) Another, more common name for the natural logarithm, $\ln(x)$

logten( ) The common logarithm or log base 10, $\log_{10}(x)$

arcsin( ) The inverse sine function. asin( ) is another name for arcsine.

arccos( ) The inverse cosine function. acos( ) is another name for arccosine.

arctan( ) The inverse tangent function. atan( ) is another name for arctangent.

sqrt( ) The square root function

sgn( ) The sign function — $\operatorname{sgn}(x) = \begin{cases} -1 & \text{if } x < 0 \\ 0 & \text{if } x = 0 \\ 1 & \text{if } x > 0 \end{cases}$

step( ) The step function — $\operatorname{step}(x) = \begin{cases} 0 & x < 0 \\ 1 & x \geq 0 \end{cases}$ (0 if x < 0, 1 if x >= 0)

fact( ) The factorial function (defined only for non-negative integers), $\text{fact}(n) = (n)(n-1)(n-2)\cdots(3)(2)(1)$

Academic Computing

- Assistive Technology for Students with Disabilities
- Computer Facilities
- Helpful Links
- Hours of Service
- Policies
- Security Awareness Training
- Software for Use
- Staff Directory
- What's New

Computer Facilities

Academic Computing consists of 16 computer labs located throughout the campus which are equipped with networked microcomputers. All of the labs have Internet access.

The following computer labs are setup with COMWEB

ME 201 ME 224 ME 302
ME 318 ME 320 ME 328
ME G16

The following computer labs are equipped with wireless connectivity

ME 329 RBSC 308 RBSC 309

Listed below are the locations, supervisors (day/eve) and telephone numbers of the computer labs.

Roscoe Brown Center 308

Wireless!
Mac OSX/MS Windows

Lab Supervisor(s):

Aisha Pearson
Benjamin John Rose

718.289.5100 Ext. 3540

Roscoe Brown 309

Wireless!
MS Windows

Lab Supervisor(s):

Malik Le-Gare

New Hall 23

MS Windows

Lab Supervisor(s):

Alfida Morel

718.289.5005

Meister Hall 201

MS Windows
COMWEB Ready

Lab Supervisor(s):

Africa Gomez
Benjamin Ankomah

718.289.5442

Meister Hall 224

Double Room Lab!
MS Windows
COMWEB Ready

Lab Supervisor(s):

Ralph Perez
Brian Alejo

718.289.5424

Meister Hall 225

Double Room Lab!
Mac OSX

Lab Supervisor(s):

Ralph Perez
Brian Alejo

718.289.5424

Meister Hall 302

MS Windows
COMWEB Ready

Lab Supervisor(s):

Subramaria Venkata

718.289.5492

Meister Hall 318

MS Windows
COMWEB Ready

Lab Supervisor(s):

Nilda Rodriguez
Nicolas Estrella

718.289.5500

Meister Hall 320

MS Windows
COMWEB Ready

Lab Supervisor(s):

Robelkys Vargas
Eddy Gonzalez

718.289.5376

Meister Hall 328

Double Room Lab!
MS Windows
COMWEB Ready

Lab Supervisor(s):

Jesica Gomez
Fernando Mercado

Meister Hall 329

Wireless!
Mac OSX/MS Windows

Lab Supervisor(s):

Nancy Gonzalez
Zoila Morillo

718.289.5504

Meister Hall G01

Double Room Lab!
Mac OSX/MS Windows

Lab Supervisor(s):

Yohan Heredia
Jaimy Peña

718.289.5578

718.289.5963

Meister Hall G02

Double Room Lab!
Mac OSX/MS Windows

Lab Supervisor(s):

Yohan Heredia
Jaimy Peña

718.289.5578

Meister Hall G16

Double Room Lab!
MS Windows
COMWEB Ready

Lab Supervisor(s):

Francisco Morel
Yuderka Altagracia

718.289.5592

Meister Hall G17

Double Room Lab!
MS Windows

Lab Supervisor(s):

Francisco Morel
Yuderka Altagracia

718.289.5592

Loew Hall 320

MS Windows

Lab Supervisor(s):

Yra Yza Francisco
Christian Miranda

718.289.5878

Colston Hall 602/603

MS Windows

Lab Supervisor(s):

Yuderka Altagracia
Ismeyda Batista

718.289.5733

Carl Polowczyk Hall 320

MS Windows

Lab Supervisor(s):

Victoria Acevedo
Henry Guzman

718.289.5417

Brown Annex 107

MS Windows

Lab Supervisor(s):

Mayuri Lora
Maxi Cruz

Ext. 718.289.5100 Ext. 3137

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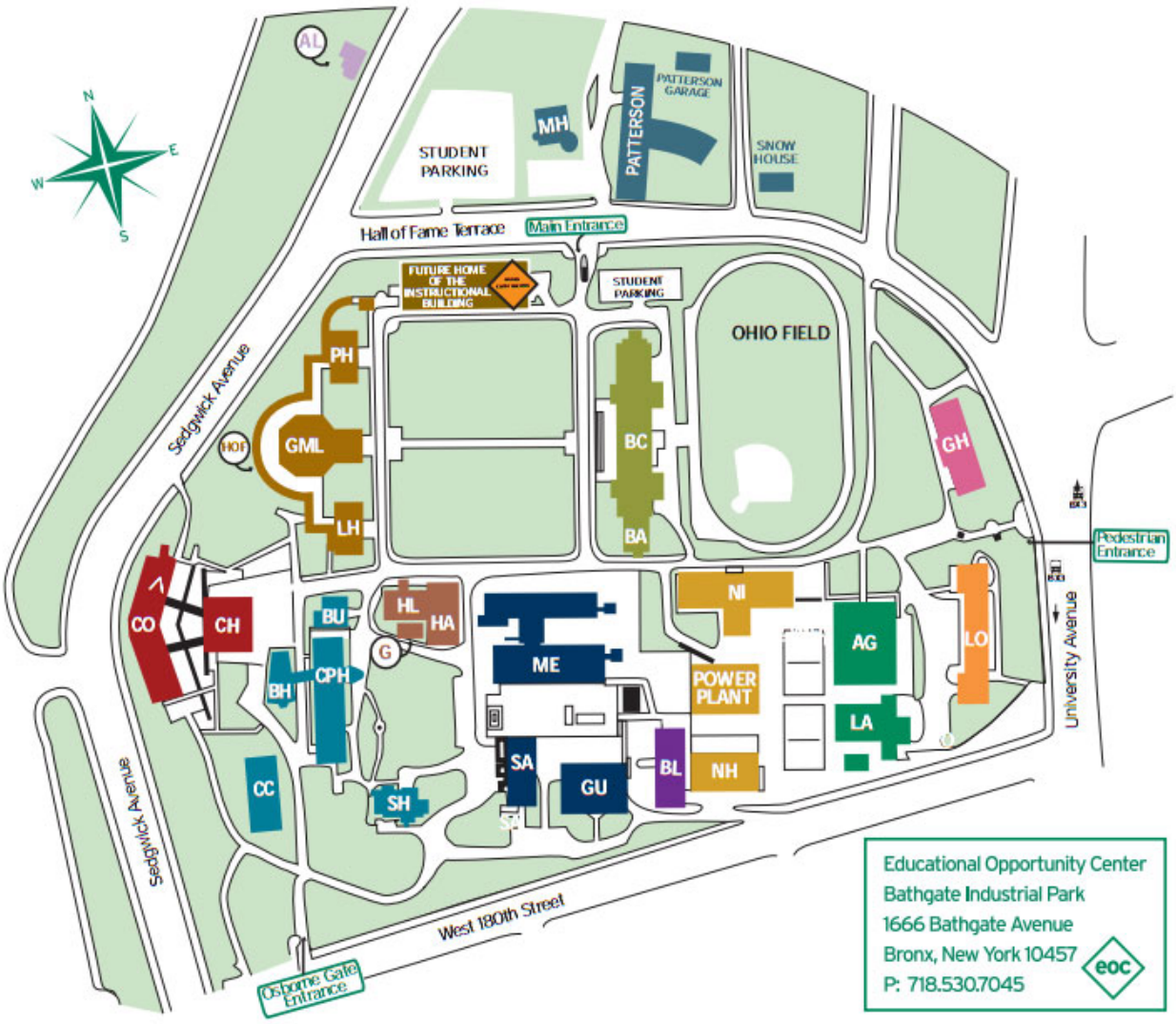

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