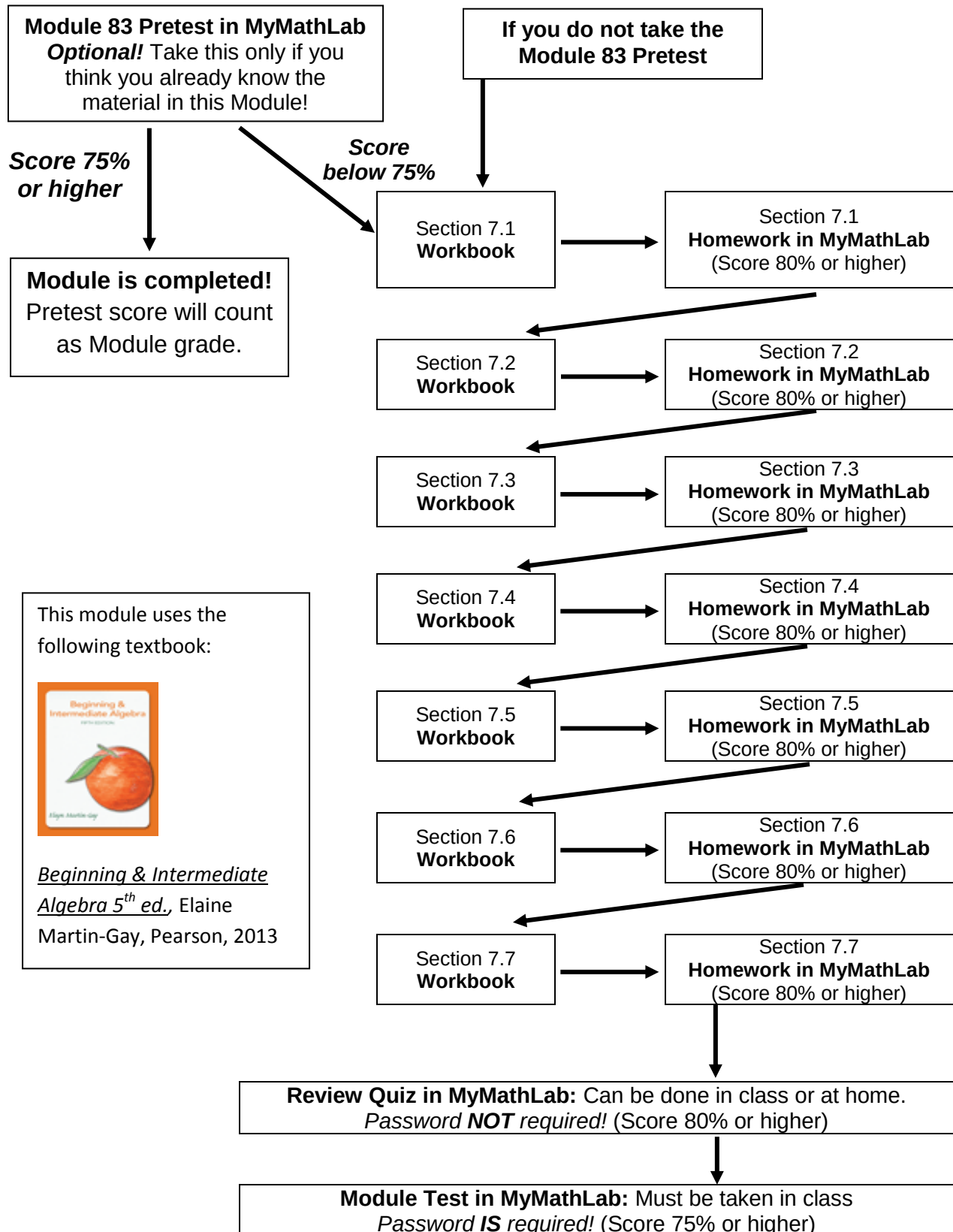


How to Complete This Module



To receive credit for problems, work must be shown. If the workbook is not completed satisfactorily, it will be returned to you for completion.

Section 7.1: Rational Functions and Simplifying Rational Expressions

- Read the introductory paragraphs at the beginning of Section 7.1 in the multimedia textbook starting on page 440. Take notes as you read.
- Write the definition of a “Rational Expression”.

Rational Expression

OBJECTIVE

1 Finding the Domain of a Rational Function



- Watch the video for this Objective. Click the  at the end of the Objective’s title on page 440 in the online textbook.
- Study Objective 1 on pages 440 and 441.
- When is a Rational Expression undefined?
Answer: _____
- Read the paragraph at the top of page 441, then write the definition of the Domain of a function: _____

- Watch the two videos for **EXAMPLE 1** on page 441. Click on  next to Example 1 in the online textbook.
- Study **EXAMPLE 1** on page 441.

- Do Practice 1 problem on page 441 in the multimedia textbook. Show your work in the box below.

PRACTICE

1

Find the domain of each rational function.

a. $f(x) = \frac{4x^5 - 3x^2 + 2}{-6}$ b. $g(x) = \frac{6x^2 + 1}{x + 3}$ c. $h(x) = \frac{8x - 3}{x^2 - 5x + 6}$

OBJECTIVE

2

Simplifying Rational Expressions

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 441 in the online textbook.
- Study the Objective 2 part of page 441 and page 442.
- Write the steps for "Simplifying or Writing a Rational Expression in Lowest Terms" given on page 442.

Simplifying or Writing a Rational Expression in Lowest Terms

Step 1: _____

Step 2: _____

- Study **EXAMPLE 2** on page 443.
- Do Practice 2 problem. Show your work in the box below.

PRACTICE

2 Simplify each rational expression.

a. $\frac{5z^4}{10z^5 - 5z^4}$

b. $\frac{5x^2 + 13x + 6}{6x^2 + 7x - 10}$

- Carefully study **EXAMPLE 3** on page 443 and **EXAMPLE 4** on page 444.
- Do the Practice problems in the box below. Show your work.

PRACTICE

3 Simplify each rational expression.

a. $\frac{x+3}{3+x}$

b. $\frac{3-x}{x-3}$

PRACTICE

4 Simplify $\frac{20 - 5x^2}{x^2 + x - 6}$.

- Here is the Concept Check given on page 444.

✓ CONCEPT CHECK

Recall that we can only remove *factors* of 1. Which of the following are *not* true? Explain why.

- a. $\frac{3-1}{3+5}$ simplifies to $-\frac{1}{5}$. b. $\frac{2x+10}{2}$ simplifies to $x+5$.
 c. $\frac{37}{72}$ simplifies to $\frac{3}{2}$. d. $\frac{2x+3}{2}$ simplifies to $x+3$.

Answers to Concept Check	
a.	b.
c.	d.

OBJECTIVE

3

Writing Equivalent Forms of Rational Expressions



Many rational expressions may look different but be equivalent.

- Watch the video for **EXAMPLE 6** on page 445. Click on  next to Example 6 in the online textbook.
- Study **EXAMPLE 6** on page 445.
- Do Practice 6 problem and show your work in the box below.

PRACTICE

6

List some equivalent forms of $-\frac{x+3}{6x-11}$.

OBJECTIVE

4

Using Rational Functions in Applications

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 446 in the online textbook.
- Study **EXAMPLE 7** on page 446 of the multimedia textbook.
- Pay attention to the meaning and the units of the variable and the function.
- Do Practice 7 problem below. Show your work.

PRACTICE

7

A company's cost per tee shirt for silk screening x tee shirts is given by the rational function $C(x) = \frac{3.2x + 400}{x}$. Find the cost per tee shirt for printing:

a. 100 tee shirts



b. 1000 tee shirts

Do the **Vocabulary, Readiness & Video Check** Exercises on p. 447 in your multimedia textbook. Write your answers in the spaces provided below the questions.

Vocabulary, Readiness & Video Check

Use the choices below to fill in each blank. Some choices may not be used.

1 true rational simplified $\frac{-a}{-b}$ $\frac{-a}{b}$ $\frac{a}{-b}$
 -1 false domain 0

1. A _____ expression is an expression that can be written as the quotient $\frac{P}{Q}$ of two polynomials P and Q as long as $Q \neq 0$.
2. A rational expression is undefined if the denominator is _____.
3. The _____ of the rational function $f(x) = \frac{2}{x}$ is $\{x | x \text{ is a real number and } x \neq 0\}$.
4. A rational expression is _____ if the numerator and denominator have no common factors other than 1 or -1 .
5. The expression $\frac{x^2 + 2}{2 + x^2}$ simplifies to _____.
6. The expression $\frac{y - z}{z - y}$ simplifies to _____.
7. For a rational expression, $-\frac{a}{b} = \frac{\quad}{\quad} = \frac{\quad}{\quad}$.
8. True or false: $\frac{a - 6}{a + 2} = \frac{-(a - 6)}{-(a + 2)} = \frac{-a + 6}{-a - 2}$. _____

1. _____ 2. _____ 3. _____ 4. _____
 5. _____ 6. _____ 7. _____ 8. _____

Complete the online homework in MML for Module 83 section 7.1 HW.

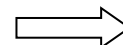


Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Vocabulary, Readiness & Video Check
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Move to the next section



Section 7.2: Multiplying and Dividing Rational Expressions

OBJECTIVE

1**Multiplying Rational Expressions**

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 451 in the online textbook.
- Write how to Multiply Rational Expressions given in the box on page 451.

Multiplying Rational Expressions

- It is best to factor all polynomials in the numerator and denominator first.
- Study page 452.
- Summarize the three steps that should be used to multiply rational expressions.

Multiplying Rational Expressions

Step 1:

Step 2:

Step 3:

- Study Examples 1, 2, and 3; then do Practice 3 problem and show your work in the box below.

PRACTICE

3

Multiply: $\frac{6 - 3x}{6x + 6x^2} \cdot \frac{3x^2 - 2x - 5}{x^2 - 4}$

**Graphing Calculator Practice Problem***Using the Graphing Calculator to Check a Multiplication Problem*

- a) Multiply and simplify. Show your work in the space below. Work must be shown to receive credit for this problem. Recall how to enter equations into the Y editor. Enter the expression below for Y_1 and your simplified expression for Y_2 .

$$\frac{y^2 + 10y + 25}{4y + 20} \cdot \frac{12y^3 + 36y^2}{y^2 + 6y + 9}$$

- b) Explain how you use the Y editor and TABLE feature on your calculator to determine if your solution is correct. If your multiplication is wrong, redo part (a) and verify that your Y editor entries are correct.

- c) In the table that follows, write in the values for Y_1 and Y_2 that correspond to each x value.

X	Y_1	Y_2
0		
1		
2		
3		
4		
5		
6		

OBJECTIVE

2 Dividing Rational Expressions

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 451 in the online textbook.
- Review the  **Helpful Hint** about the “reciprocal” of a fraction on page 453.
- Write how to Divide Rational Expressions given in the box on page 453.

Dividing Rational Expressions

- Study Examples 4 through 7 in Objective 2.
- Watch the video for **EXAMPLE 5** on page 454. Click on  next to Example 5 in the online textbook.
- Do Practice 4 – 8 problems showing your work in the box on the next page.

PRACTICE

4

Divide: $\frac{5a^3b^2}{24} \div \frac{10a^5}{6}$

PRACTICE

5

Divide $\frac{(x-5)^2}{3}$ by $\frac{4x-20}{9}$

PRACTICE

6

Divide $\frac{10x-2}{x^2-9} \div \frac{5x^2-x}{x+3}$

PRACTICE

7

Divide $\frac{3x^2-11x-4}{2x-8} \div \frac{9x+3}{6}$

PRACTICE

8

Multiply or divide as indicated.

a. $\frac{y+9}{8x} \cdot \frac{y+9}{2x}$

b. $\frac{y+9}{8x} \div \frac{y+9}{2}$

c. $\frac{35x-7x^2}{x^2-25} \cdot \frac{x^2+3x-10}{x^2+4x}$

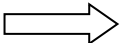
Complete the Online homework in MML for **Module 83 Section 7.2 HW**.



Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Move to the next section 

**Section 7.3: Adding and Subtracting Rational Expressions with
Common Denominators and Least Common Denominator**

OBJECTIVE

**1 Adding and Subtracting Rational Expressions
with the Same Denominator**

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 460 in the online textbook.
- In your own words, describe the process to add/subtract rational expressions with the same denominator:

- Study Examples 1, 2, and 3 on page 461 of the multimedia textbook. Pay close attention to the subtraction on Example 3. Use parentheses to avoid mistakes! Notice how the result is simplified as much as possible by factoring the numerator.
- Work on Practice 3 problem below. Show your work in the box.

PRACTICE

3

Subtract: $\frac{4x^2 + 15x}{x + 3} - \frac{8x + 15}{x + 3}$

OBJECTIVE

2 Finding the Least Common Denominator



- Watch the video for this Objective. Click the  at the end of the Objective's title on page 462 in the online textbook.
- Write the steps for "Finding the Least Common Denominator (LCD)" given on page 462.

Finding the Least Common Denominator (LCD)

Step 1: _____

Step 2: _____

- Study **EXAMPLE 4** on page 462.
- Practice finding the LCD for the pairs in the Practice 4 example; show your work below.

PRACTICE

4 Find the LCD for each pair.

a. $\frac{3}{14}, \frac{5}{21}$

b. $\frac{4}{9y}, \frac{11}{15y^3}$

Show Your Work

a.

b.

- Study Examples 5 through 8 on pages 463 and 464 of the multimedia textbook. Notice the change of signs in Example 8!
- Watch the videos for **EXAMPLE 5** on page 463 and **EXAMPLE 8** on page 464. Click on  next to Examples 5 and 8 in the online textbook.
- Practice finding the LCD for the Practice problems below. Show your work.

PRACTICE

7

Find the LCD of $\frac{x-5}{x^2+5x+4}$ and $\frac{x+8}{x^2-16}$

PRACTICE

8

Find the LCD of $\frac{5}{3-x}$ and $\frac{4}{x-3}$

OBJECTIVE

3

Writing Equivalent Rational Expressions



- Watch the video for this Objective. Click the  at the end of the Objective's title on page 464 in the online textbook.
- Study Example 9 on page 464.
- Do Practice 9 problem below.

PRACTICE

9

Write each rational expression as an equivalent fraction with the given denominator.

a. $\frac{3x}{5y} = \frac{\quad}{35xy^2}$

b. $\frac{9x}{4x+7} = \frac{\quad}{8x+14}$

Show Your Work

a.

b.

- Study Example 10 on page 465. ***It is very important to factor the denominator of the original expressions.***
- Watch the video for **EXAMPLE 10** on page 465. Click on  next to Example 10 in the online textbook.
- Do Practice 10 problem below. Show your work.

PRACTICE

10 Write the rational expression as an equivalent rational expression with the given denominator.

$$\frac{3}{x^2 - 2x - 15} = \frac{\quad}{(x - 2)(x + 3)(x - 5)}$$

Do the **Vocabulary, Readiness & Video Check** Exercises on p. 465 in your multimedia textbook. Write your answers in the spaces provided below the questions.

Vocabulary, Readiness & Video Check

Use the choices below to fill in each blank. Not all choices will be used.

$$\frac{9}{22} \quad \frac{5}{22} \quad \frac{9}{11} \quad \frac{5}{11} \quad \frac{ac}{b} \quad \frac{a-c}{b} \quad \frac{a+c}{b} \quad \frac{5-6+x}{x} \quad \frac{5-(6+x)}{x}$$

- $\frac{7}{11} + \frac{2}{11} =$ _____
- $\frac{7}{11} - \frac{2}{11} =$ _____
- $\frac{a}{b} + \frac{c}{b} =$ _____
- $\frac{a}{b} - \frac{c}{b} =$ _____
- $\frac{5}{x} - \frac{6+x}{x} =$ _____

Fill in your answers in the spaces below.

- _____
- _____
- _____
- _____
- _____

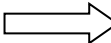
Complete the Online homework in MML for **Module 83 Section 7.3 HW**.



Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Vocabulary, Readiness & Video Check
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Move to the next section 

Section 7.4: Adding and Subtracting Rational Expressions with Unlike Denominators

OBJECTIVE

1

**Adding and Subtracting Rational Expressions
with Unlike Denominators**



- Watch the video for this Objective. Click the  at the end of the Objective's title on page 468 in the online textbook.
- Write the steps for "Adding or Subtracting Rational Expressions with Unlike Denominators" given on page 468.

Adding or Subtracting Rational Expressions with Unlike Denominators

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

- Study Examples 1 through 4 on pages 468 to the top of page 470.

- Do Practice problems 1, 2, and 4 below. Show your work.

PRACTICE 1 Perform each indicated operation. a. $\frac{2x}{5} - \frac{6x}{15}$ b. $\frac{7}{8a} + \frac{5}{12a^2}$	a.	b.
PRACTICE 2 Subtract: $\frac{12x}{x^2 - 25} - \frac{6}{x + 5}$		
PRACTICE 4 Subtract: $\frac{6}{x - 5} - \frac{7}{5 - x}$		

- Study Examples 5 through 8 on pages 470 and 471.
- Watch the videos for **EXAMPLE 5** on page 470 and **EXAMPLE 7** on page 471. Click on  next to Examples 5 and 7 in the online textbook.

- Do Practice problems 5 and 7 below. Show your work.

PRACTICE

5

Add: $2 + \frac{b}{b+3}$

PRACTICE

7

Add: $\frac{2x}{x^2 + 7x + 12} + \frac{3x}{x^2 - 9}$

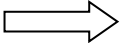
Complete the Online homework in MML for **Module 83 Section 7.4 HW.**



Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Move to the next section 

Section 7.5: Solving Equations Containing Rational Expressions

OBJECTIVE

1

Solving Equations Containing Rational Expressions

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 474 in the online textbook.

The first step is to multiply each term by the LCD.

- Use Examples 1 (page 474) and 2 (page 475) to review how to do that when the denominators are just numbers.
- Watch the Video for Example 2. Click on  next to Example 2 in the online textbook.
- Then, study Example 3 on pages 475 and 476 to see how to proceed when there are polynomials in the denominator.

Important:

Recall from Section 7.1 that a rational expression is defined for all real numbers except those that make the denominator of the expression 0. This means that if an equation contains *rational expressions with variables in the denominator*, we must be certain that the proposed solution does not make the denominator 0. If replacing the variable with the proposed solution makes the denominator 0, the rational expression is undefined and this proposed solution must be rejected.

Work on Practice 3 problem below. Show your work.

PRACTICE

3

Solve: $8 + \frac{7}{x} = x + 2$

- Write the steps for “Solving an Equation Containing Rational Expressions” given on page 476.

Solving an Equation Containing Rational Expressions

Step 1: _____

Step 2: _____

Step 3: _____

- Study Examples 4 (page 476) and 5 (page 477).
- Watch the Video for Examples 4 and 5. Click on  next to Examples 4 and 5 in the online textbook.

Do Practice 4 and 5 problems. Show your Work.

PRACTICE

4

Solve: $\frac{6x}{x^2 - 5x - 14} - \frac{3}{x + 2} = \frac{1}{x - 7}$

Show Your Work

PRACTICE

5

Solve: $\frac{7}{x-2} = \frac{3}{x-2} + 4$

 CONCEPT CHECK

When can we clear fractions by multiplying through by the LCD?

- a. When adding or subtracting rational expressions
- b. When solving an equation containing rational expressions
- c. Both of these
- d. Neither of these

Answer:

Skip OBJECTIVE **2** Solving Equations for a Specified Variable on page 478.

- Review the Graphing Calculator Explorations at the bottom of page 478.

**Graphing Calculator Practice Problem:***Using the Graphing Calculator to Check a Rational Equation*

- a) Solve the following equation with rational expressions. Show your work in the space below. Work must be shown to receive credit for this problem.

$$\frac{x}{x-1} = \frac{4}{x-1} + 2$$

- b) Use the Graphing Calculator to check your answer(s). Explain your steps. (list what you entered in Y1, Y2, etc.)

Do the **Vocabulary, Readiness & Video Check** Exercises on p. 479 in your multimedia textbook. Write your answers in the spaces provided below the questions.

Vocabulary, Readiness & Video Check

Multiple choice. Choose the correct response.

- Multiply both sides of the equation $\frac{3x}{2} + 5 = \frac{1}{4}$ by 4. The result is:
 a. $3x + 5 = 1$ b. $6x + 5 = 1$ c. $6x + 20 = 1$ d. $6x + 9 = 1$
- Multiply both sides of the equation $\frac{1}{x} - \frac{3}{5x} = 2$ by $5x$. The result is:
 a. $1 - 3 = 10x$ b. $5 - 3 = 10x$ c. $1 - 3 = 7x$ d. $5 - 3 = 7x$

Choose the correct LCD for the fractions in each equation.

- Equation: $\frac{9}{x} + \frac{3}{4} = \frac{1}{12}$; LCD: _____
 a. $4x$ b. $12x$ c. $48x$ d. x
- Equation: $\frac{8}{3x} - \frac{1}{x} = \frac{7}{9}$; LCD: _____
 a. x b. $3x$ c. $27x$ d. $9x$
- Equation: $\frac{9}{x-1} = \frac{7}{(x-1)^2}$; LCD: _____
 a. $(x-1)^2$ b. $x-1$ c. $(x-1)^3$ d. 63
- Equation: $\frac{1}{x-2} - \frac{3}{x^2-4} = 8$; LCD: _____
 a. $(x-2)$ b. $x+2$ c. x^2-4 d. $(x-2)(x^2-4)$

1. _____ 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

Complete the Online homework in MML for **Module 83 Section 7.5 HW**.



Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____ Move to the next section

Section 7.6: Proportion and Problem Solving with Rational Equations

OBJECTIVE

1**Solving Proportions**

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 482 in the online textbook.

In your own words, what is a *proportion*? _____

- Study Objective 1 on pages 482 through Example 2 on page 484.

Do Practice 2 problem below. Show your work.

PRACTICE

2

Solve for x : $\frac{3x + 2}{9} = \frac{x - 1}{2}$

OBJECTIVE

2**Using Proportions to Solve Problems**

Proportions can be used to model and solve many problems.

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 484 in the online textbook.
- Study Objective 2 on pages 484 through Example 4 on page 486.

Do the Practice 3 and 4 problems below. Show your work.

PRACTICE

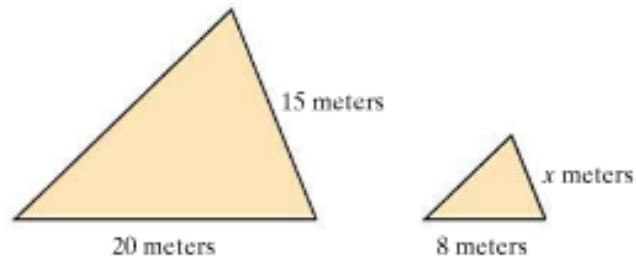
3

Four 2-liter bottles of Diet Pepsi cost \$5.16. How much will seven 2-liter bottles cost?

PRACTICE

4

If the following two triangles are similar, find x .



Skip **OBJECTIVE 3** Solving Problems About Numbers on pages 486 and 487.

OBJECTIVE

4

Solving Problems About Work

Problems related to Work Rates appear often in different fields.

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 487 in the online textbook.
- Study Example 6 on pages 487 and 488.

Do Practice 6 problem below. Show your work.

PRACTICE

6

Cindy Liu and Mary Beckwith own a landscaping company. Cindy can complete a certain garden planting in 3 hours, while Mary takes 4 hours to complete the same job. If both of them work together, how long will it take to plant the garden?

OBJECTIVE

5

Solving Problems About Distance

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 488 in the online textbook.
- Study Objective 5 on pages 488 to 490.

Do Practice 7 problem below. Show your work.

PRACTICE

7

A bus travels 180 miles in the same time that a car travels 240 miles. If the car's speed is 15 mph faster than the speed of the bus, find the speed of the car and the speed of the bus.

Complete the **Vocabulary, Readiness & Video Check** Exercises 3-8 on p. 490 in your multimedia textbook. Copy the answers in the spaces provided.

Vocabulary, Readiness & Video Check

Translating:

Given the variable in the first column, use the phrase in the second column to translate to an expression and then continue to the phrase in the third column to translate to another expression. Write your answers in the spaces below.

3.	A number: x	The reciprocal of the number:	The reciprocal of the number, decreased by 3:
4.	A number: y	The reciprocal of the number:	The reciprocal of the number, increased by 2:
5.	A number: z	The sum of the number and 5:	The reciprocal of the sum of the number and 5:
6.	A number: x	The difference of the number and 1:	The reciprocal of the difference of the number and 1:
7.	A number: y	Twice the number:	Eleven divided by twice the number:
8.	A number: z	Triple the number:	Negative ten divided by triple the number:

3. _____

4. _____

5. _____

6. _____

7. _____

8. _____

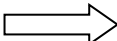
Complete the Online homework in MML for **Module 83 Section 7.6 HW**.



Before moving on to the next section, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Vocabulary, Readiness & Video Check
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Move to the next section 

Section 7.7: Simplifying Complex Fractions

- Read the opening paragraphs to Section 7.7 on page 495.

In your own words, what is a *Complex Fraction*?

OBJECTIVE**1 Simplifying Complex Fractions: Method 1**

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 495 in the online textbook.
- Write the steps for "Simplifying a Complex Fraction: Method 1" given on page 495.

Simplifying a Complex Fraction: Method 1

Step 1: _____

Step 2: _____

Step 3: _____

- Study Objective 1 on pages 495 to 497.

- Do Practice 1 Problem below

PRACTICE

1

Simplify each complex fraction.

Show your work.

a.
$$\frac{\frac{5k}{36m}}{\frac{15k}{9}}$$

b.
$$\frac{\frac{8x}{x-4}}{\frac{3}{x+4}}$$

c.
$$\frac{\frac{5}{a} + \frac{b}{a^2}}{\frac{5a}{b^2} + \frac{1}{b}}$$

OBJECTIVE

2

Simplifying Complex Fractions: Method 2

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 497 in the online textbook.
- Write the steps for "Simplifying a Complex Fraction: Method 2" given on page 497.

Simplifying a Complex Fraction: Method 2

Step 1: _____

Step 2: _____

- Study Objective 2 on pages 497 and 498.
- Do Practice 2 Problem below.

PRACTICE

2

Use method 2 to simplify:

Show your work.

a.
$$\frac{\frac{8x}{x-4}}{\frac{3}{x+4}}$$

b.
$$\frac{\frac{b}{a^2} + \frac{1}{a}}{\frac{a}{b^2} + \frac{1}{b}}$$

OBJECTIVE

3**Simplifying Expressions with Negative Exponents**

- Watch the video for this Objective. Click the  at the end of the Objective's title on page 498 in the online textbook.
- Study Objective 3 on pages 498 and 499.

Do Practice 3 Problem below. Show your work.

PRACTICE

3

Simplify: $\frac{3x^{-1} + x^{-2}y^{-1}}{y^{-2} + xy^{-1}}$

Do Practice 4 Problem below. Show your work.

PRACTICE

4

Simplify: $\frac{(3x)^{-1} - 2}{5x^{-1} + 2}$

Complete the Online homework in MML for **Module 83 Section 7.7 HW.**



Before moving on to the next task, check to make sure you have done ALL the assignments in this section. Put an X in the box next to those that you have completed. Go back to those assignments which are incomplete.

- ☐ Student Module Workbook
- ☐ Online homework in MyMathLab (with a grade of 80 or better).

Date assignments completed: _____

Next take the Review Quiz for Module 83 in MyMathLab:

- click on the Module 83 button
- click on the Take the Review Quiz button
- choose the Module 83 Review Quiz.

***This quiz can be taken outside of the classroom.
No password is needed.***

GRAPHING CALCULATOR TOOLS

In Modules 70 and above you will be required to know how to use the TI-84 graphing calculator. This includes: TI-83, TI-83 Plus, TI-84 Plus, TI-84 Silver, etc.

For resources on how to use the graphing calculator, click on the *Graphing Calculator Tools* button in the left navigation pane in your Prep for College Math Course.



Course Home - Graphing Calculator Tools



Graphing Calculator Help

- View the [Graphing Calculator Reference Card](#) for help using your Graphing Calculator.
- Use the [Graphing Calculator Tutorial](#) to learn basic TI calculator functions.
- Use the [Online Calculator Lessons](#) from Texas Instruments.
- Use the [Graphing Calculator Tutorial for Statistics](#) to learn basic TI calculator functions.

Bennett/Briggs/Triola, Statistical Reasoning for Everyday Life, 4/e

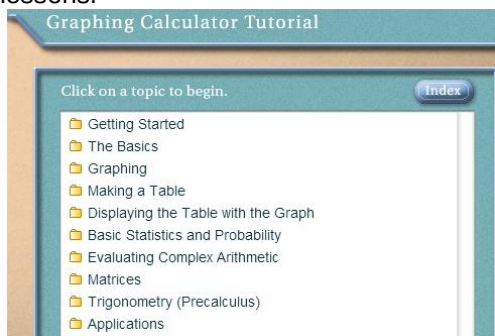
- These videos are useful for Module 73
- View the [Graphing Calculator Technology Tutorial Videos](#).
- View the [Statistics Graphing Calculator Study Card](#).

The [Graphing Calculator Reference Card](#) is a 6-page summary of how to use the calculator and some of its important functions.

- You may view this online or print it out.
- You may find this a handy reference tool, especially if you have worked with a graphing calculator before.

The [Graphing Calculator Tutorial](#) is set of interactive lessons to help you learn to use your graphing calculator.

- Modules requiring Graphing Calculator exercises will direct you to the appropriate topic.
- Click on the folder to open the various lessons.



- As you go through the lessons, you will be clicking a simulation of the calculator.
- Be sure to use **YOUR** calculator to perform the steps, making sure that you understand the process.
- **DON'T JUST CLICK THE BUTTONS ON THE SCREEN! Follow along with your own calculator**
- You are responsible for knowing the material the graphing calculator lessons
- You are responsible for the required graphing calculator problems in the module workbooks
- These skills are required for the modules 70 and above and for future courses.