

Notebook Sample

# MAT 025 - Arithmetic Review

①

## Module 1 Whole Numbers

### Section 1.1 Reading and Writing Whole Numbers

Identify place value in whole numbers.

#### Practice

- 1) Write digit in the thousands place and tens place for 6724.
- thousands 6  
 tens 2

- 2) Write digit in hundred thousands place for 972,150.
- hundred thousands 9

- 3) State the digit for 8,833,907,245 for thousands place.
- Thousands 7

- 4) Enter the number for the given period for 5,180,734
- millions period 5

Write **name of the course**. Also write the **Module** you are in.

Write the **Section** you are currently at. Also write the **objective** you are working on.

Write that you are in a **Practice** in MyMathTest. And of course, write out the **problem** you are working on along with the answer.



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Number each question on the  
**Practice** in MyMathTest.

5) What is the number for  
the given period for  
20,000,888,235.  
billions period 20

Write that you are in a  
**Quiz Me** in MyMathTest.

Quiz Me

1) State digit for the given  
place value for 5,831,206,235.  
tens place 3

Number each  
question on the  
**Quiz Me** in  
MyMathTest.

2) What digit is in the  
thousands place for  
793,452.  
thousands 3

3) What is the number for  
the given period for  
10,000,980,633.  
thousands period 980

4) What digit is in the  
thousands place and tens  
place for 1296.  
thousands 1  
tens 9



③

5) Enter the number for the given period for 9,888,230.  
thousands period 888



Write that you are in a **Post Test** in MyMathTest.

Complete all Practices and Quiz Me(s) for Section 1.1 and then proceed to Post Test 1.

Post Test 1: Reading and Writing Whole Numbers

1) Write the digit in the thousands place and tens place for 3978.  
thousands 3  
tens 7

Number each question on the **Post Test** in MyMathTest.

Show your detailed written work for each **Post Test**.



10) Rewrite the number using digits.  
Fifty-eight million, ten thousand,  
five hundred fifty-five.

58,010,555



(4)

When starting a new **Section**, always include the new heading to stay organized.

## Section 1.2 Adding Whole Numbers

Add with carrying as necessary.

### Practice

$$\begin{array}{r} \phantom{7)} \phantom{+} \phantom{5} \phantom{6} \phantom{4} \\ \phantom{7)} \phantom{+} \phantom{5} \phantom{6} \phantom{4} \\ \phantom{7)} \phantom{+} \phantom{5} \phantom{6} \phantom{4} \\ \phantom{7)} \phantom{+} \phantom{5} \phantom{6} \phantom{4} \\ \hline \phantom{7)} \phantom{+} \phantom{5} \phantom{6} \phantom{4} \end{array}$$

When setting up a problem, write the numbers with **extra spacing** between the digits and lined up vertically. This applies to adding, subtracting, multiplying, or dividing.

Complete all Practices and Quiz Me(s) for Section 1.2 and then proceed to Section 1.3 Subtracting whole numbers.

Note: Post Test 2 combines both addition and subtraction problems.



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## Section 1.3 Subtracting Whole Numbers

Subtract, borrowing as necessary.

## Practice

$$\begin{array}{r} \phantom{0} 5 \phantom{0} 15 \phantom{0} 9 \phantom{0} 12 \\ 12) \quad \cancel{68}, \cancel{10} \cancel{3} \cancel{7} - \\ \underline{- \phantom{0} 57 \phantom{0} 368} \\ \phantom{0} 8 \phantom{0} 669 \end{array}$$

Show all steps for the **borrowing** process of **subtraction**, including the slashes and new numbers at the top.

Complete all Practices and Quiz Meets and then proceed to Post Test 2.

## Post Test 2: Adding and Subtraction Whole Numbers

## Section 1.4 Multiplying Whole Numbers

Multiply by numbers having more than one digit.

+4	+4
<del>+2</del>	<del>+2</del>
<del>+5</del>	<del>+5</del>

Carries **must be shown** for  
Homework, Post Test 4,  
Midterm Exam, and Final Exam.

8 6 7

x 7 4 8

$$\begin{array}{ccccccc} & & +2 & & +1 & & \\ +1 & & 6 & & 9 & & 3 & & 6 \end{array}$$

3 4 6 8 0

$$+ 606900$$

6 4 8, 5 1 6

For **multiplication**, write the problem towards the middle of the page because as you can see, the written work flows to the left. If you write the problem on the left side of the page, you will run out of room and that will increase your chance for a calculation error.

Complete all Practices and Quiz Me(s) for Section 1.4 and then proceed to Post Test 4.

Note: Multiplication facts and Post Test 3 do not require written work because the facts must be memorized.



(7)

## Section 1.5 Dividing Whole Numbers

long ~~short~~ division.

We will use **long division** in this course, which is shown on the left.

Practice

4)

$$\begin{array}{r} 811 \text{ R } 5 \\ 6 \overline{) 4871} \\ \underline{-48} \phantom{1} \\ 07 \phantom{1} \\ \underline{-6} \phantom{1} \\ 11 \\ \underline{-6} \\ 5 \end{array}$$

When setting up a problem, write the numbers with **extra spacing** between the digits and keep the numbers lined up vertically. This will help to avoid unnecessary errors.



Complete all Practices and Quiz Me(s) for Section 1.5 and then proceed to Post Test 5.

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## Section 1.7 Rounding Whole Numbers

Complete all Practices and Quiz Me(s) for Section 1.7 and then proceed to Post Test 6.

## Section 1.8 Exponents and Order of Operations

Complete all Practices and Quiz Me(s) for Section 1.8 and then proceed to Post Test 7.



⑨

You will write your  
Practice Midterm Exam and  
Midterm Exam into your  
notebook.

## Module 2 Fractions

Follow the same note-taking  
method for all Sections of  
Module 2 as you did for  
Module 1.



# Course Outline for Your Notebook

## MAT 025 Arithmetic Review

### Module 1 Whole Numbers

#### Section 1.1 Reading and Writing Whole Numbers


- Video Lessons Notes
- Lecture Presentation Notes (*Traditional lecture course*)
- Objective 1: Identify place value in whole numbers.
  - Practice (*Homework in MyMathTest*)
  - Quiz Me (*Homework in MyMathTest*)
- Objective 2: Write whole numbers in words.
  - Practice
  - Quiz Me
- Objective 3: Write whole numbers using digits.
  - Practice
  - Quiz Me
- Objective 4: Interpret tables using whole numbers.
  - Practice
  - Quiz Me
- Post Test 1

#### Section 1.2 Adding Whole Numbers

- Video Lessons Notes
- Lecture Presentation Notes
- Objective 1: Add when carrying is not required.
  - Practice
  - Quiz Me
- Objective 2: Add with carrying as necessary.
  - Practice
  - Quiz Me
- Objective 3: Solve application problems.
  - Practice
  - Quiz Me
- Post Test 2

#### Section 1.3 Subtracting Whole Numbers

- Video Lessons Notes
- Lecture Presentation Notes
- Objective 1: Subtract when no borrowing is needed.
  - Practice
  - Quiz Me
- Objective 2: Subtract, borrowing as necessary.
  - Practice
  - Quiz Me
- Objective 3: Solve application problems.
  - Practice
  - Quiz Me
- Post Test 3



All these parts must be written into your Notebook.



## Section 1.4 Multiplying Whole Numbers

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Do chain multiplication.

Practice

Quiz Me

Objective 2: Multiply by single-digit numbers.

Practice

Quiz Me

Objective 3: Use multiplication shortcuts for numbers ending in zero.

Practice

Quiz Me

Objective 4: Multiply by numbers having more than one digit.

Practice

Quiz Me

Objective 5: Solve application problems.

Practice

Quiz Me

Post Test 4

## Section 1.5 Dividing Whole Numbers

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Write division problems using other symbols.

Practice

Quiz Me

Objective 2: Divide, if possible.

Practice

Quiz Me

Objective 3: Use ~~short~~ (long) division.

Practice

Quiz Me

Objective 4: Solve application problems.

Practice

Quiz Me

Post Test 5

## Section 1.7 Rounding Whole Numbers

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Round numbers.

Practice

Quiz Me

Objective 2: Estimate by rounding and find exact answers.

Practice

Quiz Me

Objective 3: Solve application problems.

Practice

Quiz Me

Post Test 6

All these parts must  
be written into your  
Notebook.



## Section 1.8 Exponents, Roots, and Order of Operations

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Identify an exponent and a base.

Practice

Quiz Me

Objective 2: Use the order of operations.

Practice

Quiz Me

Post Test 7

Practice Midterm Exam (Online course)

Midterm Exam (Online course)

## **Module 2 Fractions**

### Section 2.1 Basics of Fractions

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Write fractions to represent diagrams or word problems.

Practice

Quiz Me

Objective 2: Identify the numerator and denominator.

Practice

Quiz Me

Objective 3: Identify proper and improper fractions.

Practice

Quiz Me

Objective 4: Analyze part/whole relationships.

Practice

Quiz Me

### Section 2.2 Mixed Numbers

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Convert between mixed numbers and improper fractions.

Practice

Quiz Me

### Section 2.3 Factors

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Find factors of a number.

Practice

Quiz Me

Objective 2: Identify prime numbers.

Practice

Quiz Me

Objective 3: Find prime factorizations.

Practice

Quiz Me

All these parts must be written into your Notebook.

## Section 2.4 Writing a Fraction in Lowest Terms

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Test divisibility.

Practice

Quiz Me

Objective 2: Write a fraction in lowest terms using common factors.

Practice

Quiz Me

Objective 3: Write a fraction in lowest terms using prime factors.

Practice

Quiz Me

Objective 4: Determine whether two fractions are equivalent.

Practice

Quiz Me

Post Test 8

## Section 2.5 Multiplying Fractions

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Multiply with fractions.

Practice

Quiz Me

## Section 2.7 Dividing Fractions

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Find the reciprocal of a fraction.

Practice

Quiz Me

Objective 2: Divide fractions.

Practice

Quiz Me

## Section 3.1 Adding and Subtracting Like Fractions

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Add like fractions.

Practice

Quiz Me

Objective 2: Subtract like fractions.

Practice

Quiz Me

## Section 3.2 Least Common Multiples

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Find the least common multiple using multiples of the largest number.

Practice

Quiz Me

Objective 2: Find the least common multiple using any method.

Practice

All these parts must be written into your Notebook.



Quiz Me

Objective 3: Rewrite fractions with the indicated denominator.

Practice

Quiz Me

### Section 3.3 Adding and Subtracting Unlike Fractions

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Add unlike fractions.

Practice

Quiz Me

Objective 2: Subtract unlike fractions.

Practice

Quiz Me

### Section 3.5 Order Relations and the Order of Operations

Video Lessons Notes

Lecture Presentation Notes

Objective 1: Use the order of operations.

Practice

Quiz Me

Objective 2: Simplify.


Practice

Quiz Me

Post Test 9

Practice Final Exam (Online course)

Final Exam (Online course)



All these parts must  
be written into your  
Notebook.