MAT 0920 Objectives

A student should be able to ...

1. Distinguish between digits, whole numbers, and natural numbers.
2. Use set notation to describe a set of numbers.
3. Identify the place value of a digit in a number.
4. Write a whole number in expanded form.
5. Write whole numbers using word names or place value names.
6. Two or more whole numbers using an inequality.
7. Graph a whole number on a number line.
8. Round a whole number to a given place value.
9. Organize information in a table.
10. Present information as a bar graph.
11. Obtain information from a bar graph.
12. Add and subtract whole numbers using a number line.
13. Recognize and use the commutative and associative properties of addition.
15. Estimate sums and differences.
16. Check exact answers using an estimate.
17. Use the problem-solving strategy to solve word problems.
18. Rewrite multiplication as multiple additions.
19. Multiply single-digit whole numbers.
20. Use the distributive property.
21. Find a product of a whole number and a multiple of 10, 100, 1000, etc.
22. Estimate products.
23. Multiply multi-digit whole numbers.
24. Multiply a measurement by a whole number.
25. Convert a measurement to an equivalent measurement in different units (metric to metric).
26. Calculate the area of a rectangle.
27. Express division as multiple subtractions.
28. Rewrite a division problem as a multiplication problem.
29. Check the reasonability of the quotient of a division problem using multiplication.
30. Divide by 10, 100, 1000, etc.
31. Divide a measurement by a whole number.
32. Calculate quotients of multi-digit dividends and divisors.
33 Describe the order of operations.
34 Evaluate or simplify expressions following the order of operations.
35 Describe the set of integers.
36 Graph an integer on a number line.
37 Order two or more integers using inequality signs.
38 Identify the opposite of an integer.
39 Identify the absolute value of an integer.
40 Evaluate expressions that includes absolute value.
41 Round an integer to a specified place value.
42 Add integers.
43 Evaluate expressions by adding integers.
44 Solve word problems that include addition of integers.
45 Subtract integers.
46 Solve world problems that include subtraction of integers.
47 Multiply integers.
48 Divide integers.
49 Evaluate expressions using the distributive property.
50 Solve word problems that involve integers.
51 Evaluate expressions with integers following the order of operations.
52 Use a formula to solve a problem.
53 Read and interpret line graphs.
54 Construct line graphs from a set of data.
55 Determine if a number is a multiple of a given number.
56 Use divisibility laws to determine if a number is a divisor of a given number.
57 Determine the factors of a number.
58 Identify a fraction as proper or improper.
59 Identify the numerator and denominator of a fraction.
60 Describe the set of rational numbers.
61 Graph a fraction on the number line.
62 Write a fraction with a given denominator that is equivalent to another fraction.
63 Simplify a fraction to an equivalent fraction in lowest terms.
64 State the reciprocal of a number.
65 Divide fractions.
66 Solve word problems that involve division of a fraction.
67 Add or subtract fractions with a common denominator.
68 Find a common multiple for any two integers.
69 Change a fraction into an equivalent fraction with a given denominator.
Add or subtract fractions with different denominators.
Calculate the perimeter of a straight-sided figure.
Solve word problems that require the addition or subtraction of fractions.
Graph a mixed number on a number line.
Write an improper fraction that is equivalent to a given mixed number.
Write a mixed number that is equivalent to a given improper fraction.
Round a mixed number to the nearest integer.
Multiply or divide mixed numbers.
Simplify a product of two fractions before multiplying.
Add or subtract mixed numbers.
Evaluate expressions with mixed numbers following the order of operations.
Solve world problems that include mixed numbers.
Write the word name of a decimal number.
Change a decimal number to an equivalent fraction or mixed number.
Compare the size of decimal numbers.
Round a decimal number to a specified place value.
Add or subtract decimal numbers.
Estimate a sum or difference with decimal numbers.
Solve world problems that include decimal numbers.
Multiply decimal numbers.
Estimate the product of decimal numbers.
Solve world problems that include decimal numbers.
Divide a decimal by an integer or by another decimal.
Estimate a quotient of decimals.
Evaluate expressions that contain decimals following the order of operations.
Solve word problems that include decimals.
Identify ratios and rates.
Write a ratio as a fraction.
Write a rate as a fraction.
Calculate a unit rate.
Write a ratio as a percent.
Write a percent as a ratio.
Write a percent as a decimal.
Solve problems involving a percent.
Calculate sales tax on a purchase.
Solve simple word problems using a percent.