

REPORT ON THE MAT-009 FINAL EXAM ITEM ANALYSIS

Spring 2010

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As part of the ongoing assessment of our developmental mathematics courses, an item analysis of the spring 2010 Mat-009 final exam was run. Scantrons of 64 students were used to compile the following results.

It was found that 50% or more of the students in Mat-009 got the following skills wrong:

- ❖ Multi-step word problem with perimeter (fencing)**

It was found that 35% or more and fewer than 50% of the students in Mat-009 got the following skills wrong:

- ❖ Pythagorean Theorem**
- ❖ Multiplication of mixed numbers**
- ❖ Area of a circle (pizza/given diameter)**
- ❖ Solving a proportion**
- ❖ Converting a fraction to a repeating decimal**
- ❖ Fractional word problem with subtracting mixed numbers**

It was found that fewer than 20% of the students in Mat-010 got the following skills wrong:

- ❖ Dividing whole numbers**
- ❖ Multiplying a decimal by 1000**
- ❖ Writing a number in standard form, given the number in words**
- ❖ Converting a decimal to a percent**
- ❖ Decimal place value**
- ❖ Rounding decimals**
- ❖ Subtracting fractions with unlike denominators**
- ❖ Dividing fractions**
- ❖ Converting a decimal to a percent**
- ❖ Finding a percent of a number**
- ❖ Estimating sums**

- ❖ **Order of operations with whole numbers**
- ❖ **Percent word problems**
- ❖ **Multiplying a whole number by a proper fraction**
- ❖ **Ratio**
- ❖ **Place value**
- ❖ **Finding the volume of a rectangular solid**
- ❖ **Fractional word problem with mixed number addition**
- ❖ **Multi-step word problem with whole numbers**