

# Math 50 - Test #3 Study Guide

Section 22, Fall 2012, Prof. Beydler

## Test #3

- Date: Wednesday, November 28, 2012
- Will cover sections 5.1-5.8, 6.1-6.6, and 7.1-7.2.
- You'll have the entire class time to take the test. When you're finished, you can hand it in and leave.
- No notes or books.
- The first part of the test you will not have a calculator.
- When you're finished with the first part, turn it in and I'll give you the second part, where you can use a scientific or four-function calculator. Graphing calculators and mixed-use devices will not be permitted (so, no using cell phones, laptop computers, etc. as calculators). If you do not have a scientific or four-function calculator, you may borrow one from the MARC if you have a student identification card.
- Please visit my office hours if you need help. If you don't understand something, don't be embarrassed to stop by—I'm very patient. If you can't make it to my office hours, then feel free to e-mail me with any questions: [dbeydler@mtsac.edu](mailto:dbeydler@mtsac.edu) Also, don't forget to visit the MARC and get extra credit for doing so! (see syllabus for details)

Here are some of the formulas you'll want to know:

- Area of a triangle:  $A = \frac{1}{2}bh$
- Circumference of a circle:  $C = \pi d$  or  $C = 2\pi r$
- Area of a circle:  $A = \pi r^2$
- How to calculate mean and median
- Complementary angles: angles that add up to  $90^\circ$
- Supplementary angles: angles that add up to  $180^\circ$
- Pythagorean Theorem:  $a^2 + b^2 = c^2$
- $$\text{GPA} = \frac{\text{total grade points}}{\text{total credits}}$$

## Extra Credit!

- If you write up the answers to all of the review exercises listed below, and hand them in at the test, you can earn up to 2% extra credit towards the test (depending on neatness and completeness)!
- Review exercises:
  - Chapter 5 (p.358) #1-61 odd, 67
  - Chapter 6 (p.448) #1-47 odd, 57, 59, 60, 62
  - Chapter 7 (p.516) #1, 5-15 odd

## Vocabulary

A few problems on the test will be about vocabulary words you have learned. They'll be in the "fill-in-the-blank" style just like the notes. Here are the words you'll want to know for that part of the test:

<b>fraction</b> (5.1)	<b>rational expression</b> (5.2)	<b>least common denominator (LCD)</b> (5.5)
<b>rational number</b> (5.1)	<b>radius</b> (5.3)	<b>scientific notation</b> (6.3)
<b>equivalent fractions</b> (5.1)	<b>diameter</b> (5.3)	<b>irrational number</b> (6.4)
<b>improper fraction</b> (5.1)	<b>circumference</b> (5.3)	<b>ratio</b> (7.1)
<b>mixed number</b> (5.1)	<b>reciprocals</b> (5.4)	<b>probability</b> (7.1)
<b>lowest terms</b> (5.2)	<b>least common multiple (LCM)</b> (5.5)	<b>unit ratio</b> (7.1)
		<b>proportion</b> (7.2)

And here are the possible sentences you'll see on the test (each word above will fill in one blank below):

A polynomial over a polynomial is called a \_\_\_\_\_.

The distance across a circle through the center is called the \_\_\_\_\_.

A number where the decimal part does not terminate or repeat is called an \_\_\_\_\_.

The distance around a circle is called the \_\_\_\_\_.

Two numbers that multiply to 1 are called \_\_\_\_\_.

The \_\_\_\_\_ of two numbers is the smallest number that is a multiple of both the original numbers.

\_\_\_\_\_ is a convenient way to write really big or really small numbers as a decimal number between 1 and 10 multiplied by a power of 10.

A fraction where absolute value of numerator is bigger than or equal to the absolute value of denominator is called an \_\_\_\_\_.

An equation in the form  $\frac{a}{b} = \frac{c}{d}$  is called a \_\_\_\_\_.

A fraction is in \_\_\_\_\_ if the GCF of its numerator and denominator is 1.

A number that describes a part of a whole is called a \_\_\_\_\_.

A \_\_\_\_\_ is a number from 0 to 1 that represents the chances that something will happen.

A fraction whose numerator and denominator are integers is called a \_\_\_\_\_.

When two fractions name the same number (ex:  $\frac{1}{3}$ ,  $\frac{2}{6}$ , and  $\frac{4}{12}$ ), we call them \_\_\_\_\_.

The distance from the center to any point on the circle is called the \_\_\_\_\_.

An integer combined with a fraction is called a \_\_\_\_\_.

The LCM of denominators is called the \_\_\_\_\_.

A comparison between two quantities using a quotient is called a \_\_\_\_\_.

A ratio in which the denominator is 1 is called a \_\_\_\_\_.