

**Math 70**  
**Exam 1**  
**October 23rd, 2009**

Name: \_\_\_\_\_

1. Your exam contains 8 questions and 4 pages; Please make sure you have a complete exam.
2. The entire exam is worth 100 points. Point values vary and these are indicated on each problem. You have 50 minutes for this exam.
3. Make sure to **ALWAYS SHOW YOUR WORK**. If in doubt, ask for clarification.
4. **Simplify** answers as much as possible.
5. Put a box around your final answer where applicable.
6. If you need extra space, attach a sheet of paper to the back of the exam and clearly indicate this.

Problem	Total Points	Score
1	49	
2	3	
3	9	
4	9	
5	6	
6	6	
7	12	
8	6	
Total	100	

1. (49 pts.) Perform the indicated operations and simplify as much as possible.

(a) (7 pts.)  $\frac{5}{12} + 1\frac{1}{9} =$

(b) (7 pts.)  $-\frac{13}{16} - \frac{11}{16} =$

(c) (7 pts.)  $\frac{3}{2} \cdot \frac{4}{15} =$

(d) (7 pts.)  $\frac{-16}{\frac{6}{5}} =$

(e) (7 pts.)  $-8.46 - (-2.1) =$

(f) (7 pts.)  $(-\frac{1}{3})^3 =$

(g) (7 pts.)  $-2 + (1 - 3)^4 + 4 \cdot 10 =$

2. (3 pts.) Round 7361.5 to the nearest hundred.

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3. (9 pts.) Suppose you purchase a sweater that is normally \$35, but is currently on sale for 40% off. What is the sale price of the sweater? (Not including tax.)

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4. (9 pts.) Suppose you are lucky enough to encounter 40 cute and fluffy kittens! If 18 of the kittens are male, what percentage of the kittens are male?

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5. (6 pts.) My turtle Sam has a shell that is 11.2 centimeters long. What is the length of his shell in meters? (Note: 1 meter = 100 cm)

6. (6 pts.) My commute to SCC is 5.1 miles. What is this distance in kilometers?  
(Note: Use 1 mile = 1.6 kilometers)

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7. (12 pts.) Simplify the following by using distribution.

(a) (6 pts.)  $-\frac{2}{3}(24x - 6) =$

(b) (6 pts.)  $4xy(1 - 3x + 11y) =$

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8. (6 pts.) To make a batch of delicious molasses cookies, you need  $2\frac{1}{4}$  cups of flour. How much flour do you need if you want two-thirds ( $\frac{2}{3}$ ) of a batch?