Math 70
Exam 1
October 24th, 2008

Name: _____

1. Your exam contains 5 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. If you need extra space, use the back of the exam and clearly indicate this.
5. You are allowed one 3×5 notecard for handwritten notes (both sides).
6. Simplify answers as much as possible.
7. Put a $\boxed{\text{box around your final answer}}$ where applicable.

Problem	Total Points	Score
1	28	
2	10	
3	29	
4	10	
5	23	
Total	100	

1. (28 pts.) Simplify the following as much as possible.

   (a) (5 pts.) $\frac{5}{8} - \frac{3}{8}$

   (b) (7 pts.) $3\frac{1}{2} + \frac{2}{3}$ (Note: $3\frac{1}{2}$ is a mixed number, not 3 times $\frac{1}{2}$)

   (c) (5 pts.) $5 + (-9)$

   (d) (5 pts.) $12 - (-9)$

   (e) (6 pts.) $-2.1 + (-3.57)$

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2. (10 pts.) You are going to buy a pair of shoes for \$40.
   If the sales tax is 9%, how much will you have to pay for the sales tax?

3. (29 pts.) Simplify the following as much as possible.

(a) (6 pts.) $-\frac{12}{5}\left(\frac{3}{4}\right)$

(b) (4 pts.) $-30 \div 6$

(c) (6 pts.) $(-3)^4$

(d) (6 pts.) $\frac{20}{21} \div 5$

(e) (7 pts.) $(-2.4)(-1.7)$

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4. (10 pts.) The walking distance between the Seattle Center and downtown Seattle is 2,092 meters. What is this distance in kilometers? (Note: 1000 m = 1 km)

5. (23 pts.) Simplify the following as much as possible.

(a) (8 pts.) $8 - 5(6 - 3)^2$

(b) (7 pts.) $a - 2ab + 7a + 2ab$

(c) (8 pts.) $7x(2 + 3x) - 5x^2$