## Borough of Manhattan Community College Department of Mathematics

Name: $\qquad$

## MAT 008 Midterm Examination Review

The actual exam will be MULTIPLE CHOICE.

1. Round $2,602,000$ to the nearest hundred thousand.
2. Subtract: $12,301-867$.
3. Compute: $22-2 \times 3^{2}$
4. Each week you spend $\$ 105$ on groceries. How much to you spend on groceries in 52 weeks?
5. You're attending a college at which your expenses consist of $\$ 2,988$ in tuition, $\$ 524$ in student fees, and $\$ 297$ in textbooks. What are your total expenses?
6. Your will requires that your estate of $\$ 39,117$ be split among your 13 grandchildren. How much does each grandchild get?
7. Your scores on the last four exams are $80,72,80$, and 88 . Find the average (mean).
8. There are 16 women and 4 men in this class. What fraction of the class is men?
9. Simplify: $\frac{12}{20}$
10. Simplify: $\frac{18}{4}$
11. Add and simplify:: $\frac{2}{7}+\frac{3}{14}$
12. Find the sum of $2 \frac{1}{4}$ and $5 \frac{1}{8}$.
13. Subtract and simplify: $\frac{3}{8}-\frac{1}{3}$
14. Find the difference of $3 \frac{1}{6}$ and $1 \frac{2}{3}$.
15. Multiply and simplify: $\frac{2}{5} \cdot \frac{5}{6}$
16. Multiply and simplify: $2 \frac{1}{4} \cdot 20$
17. Divide and simplify: $\frac{5}{8} \div \frac{3}{4}$
18. Divide and simplify: $8 \frac{1}{2} \div 17$
19. Five-sixths of the students passed the test. If there are 36 students in the class, how many did NOT pass?
20. You want to serve each of your guests a hamburger weighing $2 / 3$ of a pound. If you bought 8 pounds of hamburger meat, how many hamburgers can you serve?
21. If 3 pieces are cut from an 8 -foot length of wood, each piece $2 \frac{1}{6}$ feet long, how much is left?
22. Thirty out of one hundred senators voted for the bill. What fraction voted for the bill?
23. If you have $2 \frac{1}{4}$ cups of oil mixed with $3 \frac{1}{2}$ cups of oil, how much oil do you have?
24. Find the smallest number: $\frac{2}{5}, \frac{1}{5}, \frac{1}{6}, \frac{2}{9}$

Compute:
25. $122+2.7+0.3$
26. $100-23.88$
27. $0.4 \times 12.5$
28. $12.5 \div 0.5$
29. Round to the nearest tenth: 70 divided by 29
30. Write as a decimal: $\frac{3}{25}$
31. Write as a fraction in lowest terms: 0.05
32. Write in increasing order: $2.222,2.099,2.1,3.01$
33. Maria makes $\$ 10.25$ an hour. How many hours must she work to make $\$ 2050$ ?
34. If gas costs $\$ 2.20$ per gallon, and you drive 130 miles (at 10 miles per gallon), how much will your trip cost?
35. Joe needs to buy 24 bottles of soda. Each bottle is $\$ 1.75$ including tax. If he has a hundred dollar bill, how much change will he get?
36. List all the factors of 16 .
37. Compute, writing your answer as a decimal: $0.2+2\left(\frac{4}{5}\right)$
38. Write in order from least to greatest: $0.4, \frac{3}{5}, \frac{3}{4}, \frac{1}{2}$
39. One-third of a deceased person's estate went to the children, one-sixth went to the siblings, and the rest to charity. What fraction went to charity?
40. A recipe called for $1 \frac{3}{8}$ cups of flour. If this recipe serves 4 , and you want to serve 8 , how much flour should you use?
41. It takes $4 \frac{1}{2}$ times as long to travel to Buffalo by train as it does by plane. If it takes 2 hours by plane, then how long is the train trip to Buffalo?
42. Write thirteen thousand seven in standard form.

## MAT 008 Practice Midterm Answer Key

1. $2,600,000$
2. 11,434
3. 4
4. $\$ 5,460$
5. $\$ 3,809$
6. $\$ 3,009$
7. 80
8. $\frac{1}{5}$
9. $\frac{3}{5}$
10. $\frac{9}{2}=4 \frac{1}{2}$
11. $\frac{1}{2}$
12. $7 \frac{3}{8}$
13. $\frac{1}{24}$
14. $1 \frac{1}{2}$
15. $\frac{1}{3}$
16. 45
17. $\frac{5}{6}$
18. $\frac{1}{2}$
19. 6
20. 12
21. $1 \frac{1}{2}$
22. $\frac{3}{10}$
23. $5 \frac{3}{4}$
24. $\frac{1}{6}$
25. 125
26. 76.12
27. 5
28. 25
29. 2.4
30. 0.12
31. $\frac{1}{20}$
32. 2.099, 2.1, 2.222, 3.01
33. 200
34. $\$ 28.60$
35. $\$ 58$
36. $1,2,4,8,16$
37. 1.8
38. $0.4, \frac{1}{2}, \frac{3}{5}, \frac{3}{4}$
39. $\frac{1}{2}$
40. $2 \frac{3}{4}$
41. 9 hours
42. 1307
