## BOROUGH OF MANHATTAN COMMUNITY COLLEGE DEPARTMENT OF MATHEMATICS

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

## **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:  $0.2 + 2\left(\frac{4}{r}\right)$
- 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	30. 0.12
2. 11,434	31. $\frac{1}{20}$
3. 4	32. 2.099, 2.1, 2.222, 3.01
4. \$5,460	33. 200
5. \$3,809	34. \$28.60
6. \$3,009 7 90	35. \$58
7. 80	36. 1, 2, 4, 8, 16
8. $\frac{1}{5}$	37. 1.8
9. $\frac{3}{5}$	38. 0.4, $\frac{1}{2}$ , $\frac{3}{5}$ , $\frac{3}{4}$
$10. \ \frac{9}{2} = 4\frac{1}{2}$	39. $\frac{1}{2}$
11. $\frac{1}{2}$	40. $2\frac{3}{4}$
12. $7\frac{3}{8}$	41. 9 hours
$13. \frac{1}{24}$	42. 1307
14. $1\frac{1}{2}$	
$15.\frac{1}{3}$	
<sup>3</sup> 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	