

BRONX COMMUNITY COLLEGE
of the City University of New York

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

MATH 01
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Exam 1
March 14, 2013

Name: _____

Instructions:

- Solve all problems.
- Write your answers in the provided space and **show all your work** in the booklet.
- All fractions in your answers should be in **lowest terms**.

1. Add:

(a) $6476 + 1352 =$

(b) $45342 + 76769 =$

(c) $42235 + 58665 =$

2. Subtract:

(a) $6373 - 4213 =$

(b) $5344 - 2765 =$

(c) $20003 - 4106 =$

3. Multiply:

(a) $6334 \times 43 =$

(b) $1663 \times 275 =$

(c) $3126 \times 1001 =$

4. Divide:

(a) $9543 \div 7 =$

(b) $1744 \div 69 =$

(c) $23623 \div 235$

5. Find the average of the following set of numbers: $\{2, 2, 3, 7, 8, 4, 9, 9, 10\}$

6. Suppose that the final grade in this class is given by the **average** of the grades in **four exams**. If your grades in the **first three** exams are 94, 82 and 88 what grade do you need to get in the last exam so that your final average is 85?

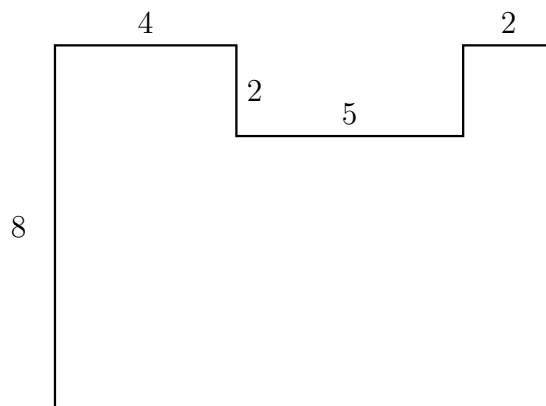
7. Find the value of the following expressions using the correct order of operations.

(a) $8 + 4 \times 2 =$

(b) $6 \div 2 \times 3 + 19 - 10 \times 2 =$

(c) $3 \times 5^2 - (8 + 2) \times 5 - 20 + 5 =$

8. Find the perimeter and the area of the following figure:



Perimeter: _____

Area: _____

9. Convert the following improper fractions to mixed numbers:

(a) $\frac{8}{3} =$

(b) $\frac{231}{17} =$

10. Convert the following mixed numbers into improper fractions:

(a) $3\frac{4}{9} =$

(b) $12\frac{8}{21} =$

11. Multiply:

(a) $\frac{3}{4} \times \frac{5}{7} =$

(b) $\frac{25}{36} \times \frac{28}{15} \times \frac{3}{70} =$

(c) $1\frac{2}{3} \times 2\frac{2}{5} =$

12. Divide:

(a) $\frac{3}{5} \div \frac{11}{2} =$

(b) $\frac{25}{36} \div 5 =$

(c) $4\frac{1}{6} \div 2\frac{2}{5} =$

13. Find the Greatest Common Factor (GCF) of 100 and 120.

14. Find the Least Common Multiple (LCM) of 66, 20, and 15.

15. Add:

(a) $\frac{7}{15} + \frac{11}{15} =$

(b) $\frac{9}{20} + \frac{7}{15} =$

(c) $\frac{7}{24} + \frac{7}{20} + \frac{5}{12} =$

16. Subtract:

(a) $\frac{13}{10} - \frac{7}{10} =$

(b) $\frac{17}{18} - \frac{7}{15} =$

(c) $3 - \frac{3}{10} =$

17. Arrange the following fractions in increasing order: $\frac{3}{4}, \frac{4}{9}, \frac{5}{8}$.