BRONX COMMUNITY COLLEGE
of the City University of New York
DEPARTMENT OF MATHEMATICS & COMPUTER SCIENCE

NAME:_____ Test 2 Sample 9/22/14
Prof. Antonakos MTH 01 D34

Each questions is 5 points. SHOW ALL WORK to receive full credit. Simplify all answers: reduce all fractions and convert improper fractions to mixed numbers. Include any units.

The actual test will be on Wednesday 10/1/14

1. $\frac{3}{7}+\frac{5}{7}+\frac{6}{7}=$

2. $-\frac{2}{8}+\frac{7}{8}-\frac{5}{8}=$

3. $21\frac{5}{12}+4\frac{1}{4}=$

4. $15\frac{3}{4}-(-2\frac{3}{4})=$

5. $22\frac{2}{11}-3\frac{8}{11}=$

6. $\frac{5}{6}+\frac{2}{9}=$

7. $\frac{10}{27} - \frac{5}{18} =$

8. Use the prime factorization of 550 and 990 to find:
(a) GCF(550, 990)=

(b) LCM(550, 990)=

9. $2 \times \frac{2}{27} \times 1\frac{1}{10} =$

10. $\frac{6}{7} \div 2\frac{1}{3} =$

11. $\frac{4}{5} + \frac{1}{6} \times \frac{4}{5}$

12. $\left(1\frac{2}{3}\right)^2 + \left(\frac{7}{9}\right)^0$

13. Find the average of the set $\{5, 8\frac{1}{3}, 2\frac{2}{3}, \frac{1}{5}\}$.

14. A rectangular room is $14\frac{2}{3}$ feet long by $8\frac{1}{4}$ feet wide. If carpet costs \$4 per square foot, how much will it cost to carpet the room?

15. A rectangular field is $15\frac{3}{8}$ yards by $12\frac{1}{8}$ yards. Fencing costs \$6 per yard. How much would it cost to enclose the field in a fence?

16. Put the fractions in increasing order:

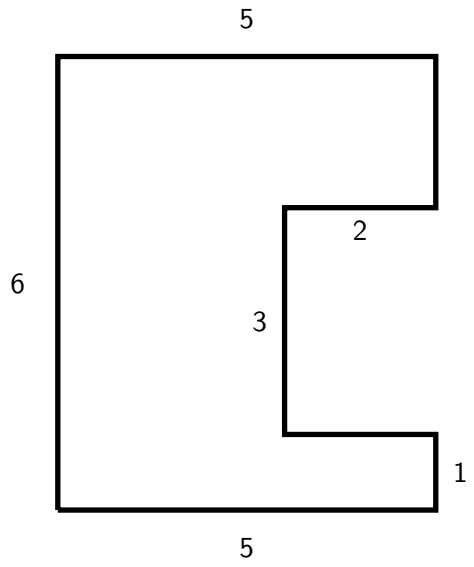
$$\frac{3}{5}, \quad \frac{3}{4}, \quad \frac{5}{8}$$

17. Find the area of a right triangle with legs $2\frac{1}{2}''$ and $6\frac{2}{5}''$.

18. $\sqrt{16^2} - \frac{100}{5} =$

19. Find the hypotenuse of a right triangle with legs 7cm and 4cm.

20. Find the area of the shape below.
Assume all angles are right angles and measurements are in feet.



End of Test 1