

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

NAME: _____
Prof. Antonakos

Test 2 take-home assignment
DUE Monday 10/6/14

10/2/14
MTH 01-D34

SHOW ALL WORK. Simplify all answers: reduce all fractions and convert improper fractions to mixed numbers. Include any units. *Each completely correct answer that you didn't get on the in-class test will add 1 point to your Test 2 grade for a total of up to 20 points.*

1. $\frac{7}{9} + \frac{15}{9} + \frac{5}{9} =$

2. $\frac{1}{12} - \frac{17}{12} =$

3. $-35\frac{7}{18} - 11\frac{5}{18} =$

4. $6\frac{5}{6} + 13\frac{2}{3} =$

5. $19\frac{2}{7} - 8\frac{6}{7} =$

6. $\frac{7}{12} + \frac{1}{20} =$

7. $\frac{11}{16} - \frac{5}{18} =$

8. $1 + 3^2 \div 2^3 =$

9. $10 \times \frac{5}{8} \times 2\frac{2}{15} =$

10. $\frac{3}{20} \div 2\frac{1}{4} =$

11. $\frac{3}{8} - \frac{1}{6} \times \frac{1}{4} =$

12. $(2\frac{3}{4})^1 + (\frac{1}{2})^2 =$

13. Find the average of the set $\{6, 5\frac{4}{5}, 2\frac{1}{5}\}$.

14. A rectangular room is $10\frac{1}{3}$ feet long by 9 feet wide. If carpet costs \$5 per square foot, how much will it cost to carpet the room?

15. A rectangular field is $11\frac{5}{8}$ yards by $12\frac{3}{8}$ yards. Fencing costs \$3 per yard. How much would it cost to enclose the field in a fence?

16. Put the fractions in increasing order:

$$\frac{3}{5}, \frac{4}{6}, \frac{8}{15}$$

17. Find the area of a right triangle with legs 15 cm and $4\frac{1}{6}$ cm.

18. Find the following:

(a) prime factorization of 90 =

(b) prime factorization of 150 =

(c) GCF(90, 150)=

(d) LCM(90, 150)=

19. Find the hypotenuse of a right triangle with legs 9'' and 4''. If the hypotenuse is not an integer, then say which consecutive integers it is between.

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

