

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

**NAME:** \_\_\_\_\_  
Prof. Antonakos

Test 3 Sample

10/10/14  
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. Decimals should be exact so indicate any repeating digits. Include any units.**

The actual test will be on Thursday 10/16/14

1.  $268.196 + 328.52 =$

2.  $2300 - 1289.79 =$

3.  $32.15 \times 4.04 =$

4.  $1.698 \div 0.8 =$

5.  $15 \div 9 =$

6. Solve for  $x$ :  $\frac{18}{x} = \frac{6}{11}$

7. Solve for  $x$ :  $\frac{\frac{4}{5}}{3} = \frac{x}{2\frac{1}{7}}$

8. (a)  $\text{GCF}(36, 24) =$

(b)  $\text{LCM}(36, 24) =$

9. Solve for  $x$ :  $5x - 12 = 9$

10. Solve for  $x$ :  $-\frac{2}{3}x = 18$

11. Change  $4\frac{3}{10}\%$  to a decimal or reduced fraction.

12. Give 0.006 as a percent.

**13.** If 75% of a number is 120, what is the number?  
Round to one decimal point if needed.

**14.** Put the fractions in increasing order:

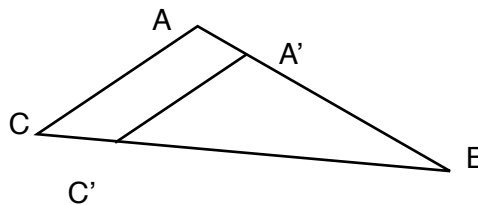
$$\frac{4}{9}, \quad \frac{2}{3}, \quad \frac{7}{12}$$

**15.** If the temperature is  $50^{\circ}$  Fahrenheit, what is it in degrees Celsius? Use  $C = \frac{5}{9}(F - 32)$ .

**16.** Evaluate  $3x^2 - 5x + 9$  when  $x = -2$ .

17. If 32 out of 40 students passed a class, find the exact percentage of students who failed.

18. Given  $\overline{AC}$  is parallel to  $\overline{A'C'}$ , and that sides  $\overline{AC} = 10\text{cm}$ ,  $\overline{A'C'} = 6\text{cm}$ , and  $\overline{AB} = 12\text{cm}$ , find the length of  $\overline{A'B}$ .



19. A right triangle with hypotenuse of 16cm has one 9cm leg. How long is the other leg?

20. If a 2m tall man casts a 3m shadow, how tall is a tree that casts a 5m shadow?