TEST NAME: **Math 8 online feb 07**
TEST ID: **2859892**
GRADE: **08 - Eighth Grade - 09 - Ninth Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **My Classroom**

Student: _____

Class: _____

Date: _____

1. Which equation has an infinite number of solutions?

   A. $7(1-4x)+3x=7$

   B. $5(2-4x)+4x=10$

   C. $8(2-2x)+16x=9$

   D. $6(3-2x)+12x=18$

2. How many solutions does the equation $3x-2x+4=2+x+2$ have?

   A. no solution

   B. one solution

   C. two solutions

   D. infinitely many solutions

3. Which equation has no solution?

   A. $-5+8x-9=3(x+3)$

   B. $-2(6-3x)=-12+6x$

   C. $6-2(3-2x)=-4(3-x)$

   D. $-(4x+9)=2x-3(2x+3)$

4. A student solved an equation for the unknown value of n as $0 = 0$. Which set represents all of the possible values of n?

A. only zero can be the solution

B. only positive numbers can be the solution

C. only negative numbers can be the solution

D. any number can be the solution

5. **Which equation has no solution?**

A. $3k - 20 = 12$

B. $8 + 15g = 15 + 8g$

C. $12x + 6 = 3(4x + 2)$

D. $9p + 7 = 6p - 2 + 3p$

6. **An equation is given below.**

$$6 - 2(4 - x) + 3x = 5x - 2$$

Based on the equation, which of the following is a valid statement?

A. The only value that satisfies the equation is $x = 0$.

B. The only value that satisfies the equation is $x = 3$.

C. There are no values of x that satisfy the equation.

D. Any real number value of x satisfies the equation.

7. **Which statement regarding the number of solutions for the linear equation shown below is true?**

$$4(3x + 8) - 9 = 2(6x - 8) + 39$$

A. There are infinitely many solutions.

B. There are exactly two solutions.

C. There is exactly one solution.

D. There is no solution.

8. Mary earns $7.25 an hour. She can determine her salary, s, for the number of hours she works, h, by using the equation $s = 7.25h$. Which statement explains why s is a function of h?

A. For every value of h there is only one value of s.

B. For some values of h there is more than one value of s.

C. For some values of s there is more than one value of h.

D. For every value of s there are two values of h.

9. In which equation is y a nonlinear function of x?

A. $y = {}^{-}3x + 6$

B. $y = {}^{-}5 + 0.4x$

C. $y = 2x - 8$

D. $y = x^2 - 6$

10. Which table of values is a linear function?

A.

x	y
−1	1
0	0
1	1

B.

x	y
1	1
2	4
3	9

C.

x	y
−1	1
2	4
5	7

D.

x	y
0	0
3	2
5	4

11. Which equation is a linear function?

A. $y = x^3 + 4$

B. $y = x^2 + 4$

C. $y = x + 4$

D. $y = {}^{-}x^2 + 4$

12. Which set of points lie on the same line?

A. (0, 2), (4, 4), (6, 8)

B. (2, 0), (4, 2), (6, 8)

C. (0, 2), (4, 4), (8, 12)

D. (2, 0), (4, 4), (8, 12)