**M&L Test 1: Algebra Name : Davis Klevgard**

**For items 1-4, write as indicated and evaluate.**

1. Write with a rational exponent and evaluate:

262144^(2/3) = 4096

2. Write as a radical and evaluate:

√(10000) ^3 = 1000000

3. Write with a rational exponent and evaluate:

64^(11/6) = 2048

4. Write as a radical and evaluate:

()^3 = 512

**For items 5-8, evaluate and write as indicated.**

5. Evaluate and write as a decimal.

.25 - .0625 = .1875

6. Evaluate and write as a fraction.

.001 - .01 = -.009 = -

7. Evaluate and write as a decimal.

8/64 = .125

8. Evaluate and write as a fraction.

.00390625 \*16 = .0625 =

**For items 9-10, use the order of operations to evaluate the expression.**

9.

(45 – 16 – 18)/ (36 – 16 +5) +1

(11)/ (25) + 1

.44 + 1 = 1.44

10.

7(8 + 27 – 1) + 2^2

7(34) + 4

238 + 4 = 242

**For items 11-12, simplify the algebraic expression.**

11. –16 – 12(17x + 14) + 13x

-16 – 204x – 168 + 13x

-184 – 191x

12. 11(19 – 15x) + 20x – 18

209 – 165x +20x – 18

191 – 154x

**For items 13-16, solve for x.**  **Check your answer.**

13. 9 + 5x – 3 = 46

5x + 6= 46

5x = 40

X = 8

14. 5 + 8x – 13 = x + 14 + 5x

8x – 8 = 6x + 14

2x = 22

X = 11

15. 5 – 3x = 7 + 4(3 – 2x)

5 – 3x = 7 + 12 – 8x

8x – 3x = 7 + 12 – 5

5x = 14

X = = 2.8

16. 6(8x + 1) = 4(7x – 1) + 19

48x + 6 = 28x – 4 + 19

48x – 28x = 19 – 4 – 6

20x = 9

X = = .45