Name: Pre-Algebra
Date: Practice Test #1

1)   Simplify: 72,409 + 4,597 + 830,856 + 245 + 2,305,241

2)   Subtract 43,892 from 87,109

3)   Multiply 687 by 8,794

4)   Divide 624,138 by 696

5)   Divide 254.71 by 6.7 (round off the answer to two decimal places)

6)   Find the prime factorization of 741. If the number is prime, write prime.

7)   Simplify: $\dfrac{546}{495} \div \dfrac{364}{385} \div \dfrac{231}{714}$

8)   Simplify: $\dfrac{5}{156} - \dfrac{1}{234}$

9)   Simplify: $-72 \div 8 - \left|-3-3\right| \div 2 - 3\left|-1-1\right|^4$

10) Gianna plans to buy five shirts that cost $43 each, eight sweaters that cost $57 each, and seven pairs of pants that cost $39 each. What is the total cost?

11) Solve: $\dfrac{182}{x} = \dfrac{273}{55}$

12) Change $8\dfrac{3}{4}\%$ into a fraction

13) Simplify: $9\dfrac{3}{8} \cdot 4\dfrac{4}{15} \cdot 1\dfrac{1}{24}$

14) Change $\dfrac{1}{32}$ into a percent

15) Kristin's bank balance at the beginning of the week was $687.64. She wrote checks for $204.29, $62.82, $138.45, $107.48, and $5.57 during the week. She deposited $236.09 at the end of the week. What is Kristin's new balance?

16) Find 0.7% of 680

17) Simplify: $2^3 + \sqrt[5]{243} - 3^2 - 4(-1-3) - 7^0 + 18 \div 9(-1-1)$

18) Simplify: $\dfrac{\dfrac{144}{98}}{\dfrac{108}{686}}$

19) Change $9\dfrac{11}{32}$ into a decimal

20) What is the cost of $7\dfrac{1}{3}$ yards of lace at \$7.79 per yard? (round off your answer to the nearest cent if necessary)

21) Simplify $\dfrac{\dfrac{1}{54} + \dfrac{5}{48}}{\dfrac{7}{45} - \dfrac{5}{80}}$

22) Simplify $\sqrt[3]{729} - (-1-2)^3 - 8^0 - 20 \div 5(-2-2)$

23) Simplify: $4 \div 0$

24) Convert 90 MPH into yards per second

25) Simplify: $\sqrt[3]{4913}$

<p style="text-align:center">***EXTRA CREDIT***</p>

26) Solve: $-3^2 - 2(3x-1) + 18 \div 9(-1-1) - 3x = \sqrt[4]{81} - 5(2x-3) + 2^3 - (-3-1) - 4x$

1) 3,213,348
2) 43,217
3) 6,041,478
4) 896 R522 or 896.75
5) 38.02
6) $3 \cdot 13 \cdot 19$
7) $\dfrac{119}{33}$
8) $\dfrac{1}{36}$
9) -60
10) $944
11) $x = \dfrac{110}{3}$
12) $\dfrac{7}{80}$
13) $\dfrac{125}{3}$ or $41\dfrac{2}{3}$ or $41.\overline{6}$
14) 3.125%
15) $405.12
16) 4.76 or $\dfrac{119}{25}$
17) 13
18) $\dfrac{28}{3}$
19) 9.34375
20) $57.13
21) $\dfrac{265}{201}$
22) 51
23) Undefined
24) 44 yards per second
25) 17
Extra Credit
26) $x = \dfrac{41}{5}$