Alg2 Classwork/Homework, due Friday, February 2

On a <u>separate</u> sheet of paper, answer each question, showing as much of your work as possible.

Be sure to check your answer — showing that as well.

Solve each equation. If necessary, round to the nearest ten-thousandth.

79. $8^x = 444$

80. $14^{9x} = 146$

81. $3^{7x} = 120$

82. $\frac{1}{2} \log x + \log 4 = 2$

83. $4 \log_3 2 - 2 \log_3 x = 1$

84. $\log x^2 = 2$

85. $9^{2x} = 42$

86. $\log_8 (2x - 1) = \frac{1}{3}$

87. $1.3^x = 7$

88. $\log (5x - 4) = 3$

89. $2.1^x = 9$

90. $12^{4 - x} = 20$

91. $5^{3x} = 125$

92. $\log 4 + 2 \log x = 6$

93. $4^{3x} = 77.2$

94. $\log_7 3x = 3$

95. $3^x + 0.7 = 4.9$

96. $7^x - 1 = 371$