Name: _____   Date:_____

NRF Assignment #1
To receive full marks, be sure to show all of your work on looseleaf!

1. Determine the GCF of each pair of numbers.   **[value 6]**
   a) 46, 84   b) 81, 54   c) 144, 96

2. Determine the LCM of each of the following sets   **[value 7]**
   a) 15, 20   b) 22, 33, 44   c) 18, 30

3. A square has an area of 784 ft^2. What is the perimeter of the square?   **[value 3]**

4. A cube has a volume of 9261 cm^3. What is the surface area of the cube? **[value 3]**

5. a) Use a **number line** to order these numbers from least to greatest.   **[value 5]**
   b) Identify which numbers are irrational and which are rational.

$$\frac{26}{8}, \ \sqrt[4]{39}, \ -0.56, \ \sqrt[3]{-10}, \ \sqrt{4}$$

6. Write each radical in simplest form, if possible   **[value 8]**

   a) $\sqrt{54}$ c) $\sqrt[3]{48}$
   b) $\sqrt{99}$ d) $\sqrt[3]{162}$

7. Write each mixed radical as an entire radical   **[value 4]**

   a) $6\sqrt{2}$ c) $4\sqrt[3]{9}$
   b) $2\sqrt{7}$ d) $3\sqrt[3]{3}$

8. Express the side length of this square as a radical in simplest form.   **[value 2]**

Area: 360 ft^2