Math 20-1

Math 10C Radicals Review

Please complete each of the following questions on ***a separate piece of paper***.

Remember to show all your work relating to the question in a neat and organized manner and ***circle*** your final answer!

1. Identify the index and radicand in each of the following radicals. **[3 Marks]**
   1. 
   2. 
   3. 
2. Which of the following numbers are perfect squares, perfect cubes, or both? **[4 Marks]**
   1. 81
   2. 64
   3. 729
   4. 196
3. Explain in your own words the major difference between the square root of a perfect square and a non-perfect square. Provide an example with your explanation. **[2 Marks]**

1. Explain in your own words why we ***cannot*** evaluate the square root of a negative number but we **c*an*** evaluate the cubed root of a negative number. Provide an example with your explanation. **[2 Marks]**
2. Convert the following radicals to mixed radicals in ***simplest form***. **[12 Marks]**
   1. 
   2. 
   3. 
   4. 
   5. 
   6. 
3. Convert each of the following mixed radicals into whole radicals. **[3 Marks]**
   1. 
   2. 
   3. 
4. Express each of the following radicals in exponential form. **[4 Marks]**
   1. 
   2. 
   3. 
   4. 
5. Using the following exponent laws from Math 10C ( & ) write the following expression as a single radical and also in simplified exponential form. **[3 Marks]**

***Hint: Convert all of the radicals to exponential form first then work from inside term to the outside term.***



1.  can be written in the form . What is the value of ***p***? **[2 Marks]**

***Hint: Use the following exponent law from Math 10C***

