GED Calculator Prohibited Indicators Worksheet

- I. Ordering Fractions and Decimals
 - 1. Place the following numbers in order of least to greatest: -
 - $0.2, -\frac{1}{2}, 0.6, \frac{1}{3}, 1, 0, \frac{1}{6}$
 - 2. Place the following numbers in order from greatest to least:
 - $\sqrt{4}, 1\frac{4}{5}, \frac{11}{5}, \pi, 3.2$
 - Use the number line below to plot all the numbers listed in questions 1 and 2.

- II. Factors and Multiples (i.e. LCM, GCF or distributive property)
 - 1. Find the least common multiple that is necessary to manually perform the indicated operation:
 - $\frac{7}{6} \frac{1}{4}$
 - 2. Find the greatest common factor that will help reduce the fraction below into its simplest form.

 $\frac{12}{45}$

3. Create a factor tree to transform the number 72 into a product of prime factors.

- 4. Factor the expression: $7x + 42x^2$
- 5. Perform the indicated operation(s): $5x(x + 1)^2$

III. Rules of Exponents

1. Simplify the following:

•
$$x^3 \cdot x^2 =$$

•
$$3^2 \cdot 3^{-5} =$$

•
$$x^{-1} \cdot x^{-4} =$$

•
$$2^3 \div 2^2 =$$

•
$$\frac{x^4}{(x^2)^2} =$$

•
$$\frac{4^{-2}}{4^3} =$$

•
$$\frac{5^{-2}}{5^{-5}} =$$

2. Simplify the following:

•
$$(x^3)^5 =$$

• $(3^3)^{-2} =$

•
$$5(x^3)^{\frac{1}{2}} =$$

• $(4^2)^{\frac{1}{2}} =$