**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Quiz Review: Square Roots, Exponents, Scientific Notation**

Find the Area of each given square.

|  |  |
| --- | --- |
| 1.Macintosh HD:Users:mendezj:Desktop:Screen Shot 2017-05-13 at 6.14.52 PM.png | 2. side = 4 units |
| Area = \_\_\_\_\_\_\_\_\_\_ u2 | Area = \_\_\_\_\_\_\_\_\_\_ u2 |

3. Simplify the following using properties of exponents.

a. $\frac{(3x)^{3}}{x}$ b. $\left(2x\right)^{2}(3xy^{2})$ c. $\frac{16(m^{3}k)^{2}}{2m^{5}k^{3}}$ d. $\left(\frac{0.25(m^{-2}n)^{5}}{km^{4}}\right)^{0}$

4. Use estimation to order the following values on the number line below from smallest to largest.

 a. - b.  c. 

 d. - e. - f. 

 g. - h. $\sqrt{3}$ i. $\sqrt{4}$

**Now order the values above using inequalities:**

5. Perform the following operation and express your answer in scientific notation. Round your digits to the nearest tenth.

a. $\frac{2.6 × 10^{40}}{2 × 10^{38}}$ b. $(4 × 10^{15})(2.1 × 10^{5})$

6. Cross out the expression that is undefined (no real answer). Then find the value for the remaining expressions.

 = = =

 =  =  =