**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Has Grit           Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_**

**Analytic Geometry for College Graduates Day 35 HW**

**Unit 4: Extending the Number System | Topic:** Operations with Radical and Rational Exponents

**Simplify.**

1. 

$$3\sqrt[4]{2}$$

1. 

**0**

1. 

$$2x^{3}\sqrt[3]{2}$$

**Simplify each expression. Assume all variables are positive.**

1. 

**64**

1. 

**32**

1. 

$$\frac{1}{x^{\frac{9}{2}}}$$

1. 
2. 
3. 

$$4x^{2}z^{6}$$

$$x^{2}y^{9}$$

$$m^{3}n^{2}$$

1. 

$$z$$

1. 

$$\frac{1}{4x^{3}}$$

1. 

$$\frac{4y^{\frac{1}{4}}}{x^{\frac{9}{4}}}$$

**Rewrite**:

|  |  |  |  |
| --- | --- | --- | --- |
| 1.  | 2.  | 3.  | 4.  |
| 5.  | 6.  | 7.  | 8.  |
| 9.  | 10.  | 11.  | 12.  |
| 13.  | 14.  | 15.  | 16.  |