

Name: \_\_\_\_\_ Period: \_\_\_\_\_

Week 14 Homework Packet – 7<sup>th</sup> Grade Math Honors

**ASSIGNMENT DUE TUESDAY, NOVEMBER 8, 2016**

Unit 2, Chapter 4 - Powers and Roots

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Stamp

Simplify each of the following:

1)  $(m^5)^4$

2)  $(x^3y^2)^8$

3)  $(ab^4)^3$

4)  $\left(\frac{c^2}{a^4}\right)^5$

5)  $(3x^4)^2$

6)  $(z^3)^5 \cdot z^7$

The following numbers are all in incorrect scientific notation. Write them in correct scientific notation.

7)  $384.2 \times 10^{14}$

8)  $6300 \times 10^{-18}$

9)  $0.481 \times 10^{-5}$

10)  $0.0031 \times 10^{19}$

*Review*

Evaluate each of the following:

11)  $3^{-3}$

12)  $10^{-4}$

13)  $17^{-1}$

14)  $184^0$

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

Period: \_\_\_\_\_

7<sup>th</sup> Grade Math Honors

SCORE

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## ASSIGNMENT DUE WED/THU, NOVEMBER 9/10, 2016

Unit 2, Chapter 4 - Powers and Roots

For each problem below, show how you set up the problem. You will need a calculator.

1) A couple has their first child and opens a \$2,000 account for her. They plan to keep them money in the account until she turns 18. If the account has a 2% annual interest rate, what will the account be worth when she turns 18?

2) A college student takes out a \$7,000 student loan with 6% interest per year. If the student does not make any payments for five years (the amount of time he is in college), how much will he owe after five years?

3) You make an investment of \$8,000 that returns, on average, 5% per year. If you do not deposit or withdraw any other money into the account, what will it be worth after seven years?

4) A bank account has \$2,750 in it and the interest rate is 3%. What will the account be worth in six years?

Review

Evaluate each of the following. Show all work.

5)  $3 \times 10^{12} + 4.08 \times 10^{14}$

6)  $8.4 \times 10^{-7} - 3.2 \times 10^{-8}$

7)  $(5 \times 10^{-3})(9 \times 10^7)$

8)  $(1.2 \times 10^{13}) \div (2 \times 10^4)$

9)  $9.2 \times 10^{16} + 8.3 \times 10^{15}$

10)  $1.4 \times 10^{-18} - 5.2 \times 10^{-19}$