

Name \_\_\_\_\_

Date \_\_\_\_\_

Mrs. Roubos : 8R

Period \_\_\_\_\_

Take home Quiz #2 Show all work!

Due:

1. [2] Simplify: $6^7 \cdot 6 \cdot 6^5$ leave in <u>exponential form</u>	2. [2] Simplify: $2^{-7} \cdot 2^5 \cdot 2^{-5}$ . Leave your answer as a <u>fraction</u>
3. [2] What is the value of $\sqrt{144}$ ?	4. [2] What is the value of $\sqrt[3]{125}$ ?
5. [2] What is 722,000,000 in <u>scientific notation</u> ?	6. [2] Simplify: $\frac{7^{10}}{7^2}$ leave your answer in <u>exponential form</u>
7. [2] Convert $\frac{1}{5}$ to a decimal by showing <u>long division</u> .	8. [3] Subtract. Leave answer in <u>scientific notation</u> . $(2.75 \times 10^5) - (1.5 \times 10^5)$
9. [3] Between which two whole numbers is $\sqrt{44}$ . <u>Show long work!</u>	10. [2] Is $\frac{4}{5}$ rational or irrational? <u>Why?</u>

<p>11. [2] Write <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> between the two numbers.</p> $3\frac{1}{5} \quad \underline{\hspace{2cm}} \quad \sqrt{8}$	<p>12. [2] Write <math>&lt;</math>, <math>&gt;</math>, or <math>=</math> between the two values.</p> $9.7 \times 10^4 \quad \underline{\hspace{2cm}} \quad 9.9125 \times 10^4$
<p>13. [3] List in order from <u>least</u> to <u>greatest</u>.</p> $1.52 \times 10^8, \quad 4.81 \times 10^{-7}, \quad 7.5 \times 10^2, \quad 2.6 \times 10^{-5}$	<p>14. [2] Evaluate: <math>2xy + 5</math> when <math>x = 4</math> <math>y = -3</math></p>
<p>15. What is 0.000000025 in <u>scientific notation</u>?</p> <p>[2]</p>	<p>16. [2] Simplify: <math>2156^0</math></p>
<p>17. Simplify: <math>(5^{-5})^{-2}</math> Leave in <u>exponential form</u>.</p> <p>[2]</p>	<p>18. [2] Simplify: <math>7^{-2}</math> Leave your answer as a <u>fraction</u>.</p>
<p>19. Write <math>6.21 \times 10^8</math> in standard form</p> <p>[2]</p>	<p>20. Write <math>22.6 \times 10^5</math> in scientific notation.</p> <p>[2]</p>
<p>21. Is <math>\sqrt{15}</math> rational or irrational? Why?</p> <p>[3]</p>	<p>22. [3] Find the quotient. Leave in scientific notation.</p> $\frac{9.3 \times 10^8}{1.5 \times 10^{-2}}$
<p>23. Add: <math>(6.82 \times 10^8) + (3.1 \times 10^8)</math></p> <p>[3] Leave your answer in scientific notation.</p>	<p>24. [3] Multiply: <math>(8.1 \times 10^5) \cdot (6.2 \times 10^7)</math></p> <p>Leave your answer in scientific notation.</p>