Algebra - Scientific Notation **Name: _____**

Period: _____ Date: _____

Write each number in Standard Notation (3 points each).

1. 2.35×10^{5}

2. 1.01×10^{-4}

3. 9.9995×10^{6}

Write each number in Scientific Notation (3 points each).

4. 77,000,000

5. 565,482,000,000

6. 0.00000040

Order the numbers in each list from least to greatest (3 points each).

7. 4.5×10^{15}, 4.7×10^{14}, 2.9×10^{15}, 9.99×10^{14}

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8. 4.8×10^{-6}, 6.5×10^{-4}, 5.01×10^{-8}, 9.99×10^{-5}

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Simplify. Write each number using Scientific Notation (3 points each).

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

10. $5(25 \times 10^{8})$

11. $0.5(7 \times 10^{-2})$

12. Is 18×10^{-2} written in scientific notation? Explain your answer (3 points).

13. Explain why scientific notation is particularly helpful to astronomers who study distances among objects in space (4 points).