$\qquad$ Date: $\qquad$

## Scientific Notation Homework

| 1. Write the following using scientific <br> notation: | 2. Write the following in standard <br> notation: |
| :--- | :--- |
| a. $93,000,000$ | a. $7.14 \times 10^{4}$ |
| b. 384,000 | b. $1.1 \times 10^{7}$ |
| c. 0.0004732 | c. $1.045 \times 10^{-6}$ |
| d. 0.000000302 | d. $1.33 \times 10^{5}$ |
| e. $6,730,000$ | e. $5.0269 \times 10^{-3}$ |

3. Which number is equivalent to $0.0000001: 10^{7}$ or $10^{-7}$ ? How do you know?

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3. Which number is equivalent to $0.0000001: 10^{7}$ or $10^{-7}$ ? How do you know?
4. Kyleigh said that 0.00001 is bigger than 0.001 because the first number has more digits to the right of the decimal point. Is Kyleigh correct? Explain your thinking using negative powers of 10 and the number line.
5. Find the missing exponents to make the following true:
a. $84,560,000=8.456 \times 10 \square$
b. $1.045 \times 10^{\square}=0.000001045$
6. Place each of the following numbers on a number line in its approximate location: $10^{5}, 10^{-99}, 10^{-17}, 10^{14}, 10^{-5}, 10^{30}$

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