Name: $\qquad$

## Adding/Subtracting Operations with Scientific Notation Homework

1. $7.45 \times 10^{6}-5.3 \times 10^{5}$
2. $3.4 \times 10^{4}+7.1 \times 10^{5}$
3. Neptune's average distance from the Sun is $4.503 \times 10^{9} \mathrm{~km}$. Mercury's average distance from the Sun is $5.791 \times 10^{7} \mathrm{~km}$. What is the difference in the distances?

The table below shows the debt of the three most populous states and the three least populous states. Use the table for questions $3,4,5$, and 6.

| State | Debt (in dollars) | Population (2012) |
| :--- | :---: | :---: |
| California | $\mathbf{4 0 7 , 0 0 0 , 0 0 0 , 0 0 0}$ | $\mathbf{3 8 , 0 0 0 , 0 0 0}$ |
| New York | $\mathbf{3 3 7 , 0 0 0}, 000,000$ | $\mathbf{1 9 , 0 0 0 , 0 0 0}$ |
| Texas | $\mathbf{2 7 6 , 0 0 0 , 0 0 0 , 0 0 0}$ | $\mathbf{2 6 , 0 0 0 , 0 0 0}$ |
| North Dakota | $\mathbf{4 , 0 0 0}, 000,000$ | $\mathbf{6 9 , 0 0 0}$ |
| Vermont | $\mathbf{4 , 0 0 0}, \mathbf{0 0 0}, 000$ | $\mathbf{6 2 , 6 0 0}$ |
| Wyoming | $\mathbf{2 , 0 0 0}, 000,000$ | $\mathbf{5 7 , 6 0 0}$ |

4. What is the sum of the debts for the three most populous states? Express your answer in scientific notation.
5. What is the sum of the debt for the three least populous states? Express your answer in scientific notation.
6. What is the difference in the population of California and North Dakota? Express your answer in scientific notation.
