## Unit 7, Lesson 15 Practice Problems

1. Evaluate each expression, giving the answer in scientific notation:
a. $5.3 \times 10^{4}+4.7 \times 10^{4}$
b. $3.7 \times 10^{6}-3.3 \times 10^{6}$
c. $4.8 \times 10^{-3}+6.3 \times 10^{-3}$
d. $6.6 \times 10^{-5}-6.1 \times 10^{-5}$
2. a. Write a scenario that describes what is happening in the graph.
b. What is happening at 5 minutes?
c. What does the slope of the line between 6 and 8 minutes mean?

3. Apples cost $\$ 1$ each. Oranges cost $\$ 2$ each. You have $\$ 10$ and want to buy 8 pieces of fruit. One graph shows combinations of apples and oranges that total to $\$ 10$. The other graph shows combinations of apples and oranges that total to 8 pieces of fruit.

a. Name one combination of 8 fruits shown on the graph that whose cost does not total to $\$ 10$.
b. Name one combination of fruits shown on the graph whose cost totals to $\$ 10$ that are not 8 fruits all together.
c. How many apples and oranges would you need to have 8 fruits that cost $\$ 10$ at the same time?
4. Solve each equation and check your solution.

$$
-2(3 x-4)=4(x+3)+6 \frac{1}{2}(z+4)-6=-2 z+8 \quad 4 w-7=6 w+31
$$

