Algebra 1 Unit 2: Real Number System

Real Numbers in the Real World

Name: _____ **Date:** _____

Answer the following questions.

1. **Give ten examples of when you need to use addition of real numbers in the real world.**

2. **Give ten examples of when you need to use subtraction of real numbers in the real world.**

3. **Give ten examples of when you need to use multiplication of real numbers in the real world.**

4. **Give ten examples of when you need to use division of real numbers in the real world.**

Solve the following real-world problems.

5. Nadia and Peter are building castles on the beach. Nadia built a castle two feet tall, stopped for ice-cream and then added one more foot to her castle. Peter built a castle one foot tall before stopping for a sandwich. After his sandwich, he built up his castle by two more feet. Whose castle is taller?

6. Peter is hoping to travel on a school trip to Europe. The ticket costs $2400. Peter has several relatives who have pledged to help him with the ticket cost. His parents have told him they will cover half the cost. His grandma will pay one sixth of the cost, and his grandparents in Florida will send him one fourth of the cost. What fraction of the cost can Peter's relatives provide? How much will Peter have to cover?

7. Three monkeys spend the day gathering coconuts together. When they have finished, they are very tired and fall asleep. The following morning, the first monkey wakes up. Not wishing to disturb his friends, he decides to divide the coconuts into three equal piles. There is one left over, so he throws this odd one away, helps himself to his share, and goes home. A few minutes later the second monkey awakens. Not realizing that the first had already gone, he too divides the coconuts into three equal heaps. He finds one left over, throws it away, helps himself to his share and goes home. In the morning the third monkey wakes to find that he is alone. He spots the two discarded coconuts, and puts them with the pile, giving him a total of 12 coconuts. How many coconuts did the first and second monkey take? (HINT: work backwards.)