Lesson 5: Understanding Subtraction of Integers and Other Rational Numbers

Problem Set

1. On a number line, find the difference of each number and . Complete the table to support your answers. The first example is provided.

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| --- | --- | --- | --- |
| **Number** | **Subtraction Expression** | **Addition Expression** | **Answer** |
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1. You and your partner were playing the Integer Game in class. Here are the cards in both hands.

*Your hand Your partner’s hand*

* 1. Find the value of each hand. Who would win based on the current scores? (The score closest to wins.)
  2. Find the value of each hand if you discarded the and selected a , and your partner discarded the and selected a . Show your work to support your answer.
  3. Use your score values from part (b) to determine who would win the game now.

1. Write the following expressions as a single integer.
2. Explain what is meant by the following, and illustrate with an example:

“For any real numbers, and , .”

1. Choose an integer between and on the number line, and label it point . Locate and label the following points on the number line. Show your work.



* 1. Point :
  2. Point :
  3. Point :

Challenge Problem:

1. Write two equivalent expressions that represent the situation. What is the difference in their elevations?

An airplane flies at an altitude of feet. A submarine dives to a depth of feet below sea level.