Lesson Summary

The rules for adding and subtracting integers apply to all rational numbers.

The sum of two rational numbers (e.g., $-1+4.3$) can be found on the number line by placing the tail of an arrow at $-1$ and locating the head of the arrow $4.3 $units to the right to arrive at the sum, which is $3.3$.

To model the difference of two rational numbers on a number line (e.g., $-5.7-3$), first rewrite the difference as a sum, $-5.7+(-3)$, and then follow the steps for locating a sum. Place a single arrow with its tail at $-5.7$ and the head of the arrow $3 $units to the left to arrive at $-8.7$.

Homework: Unit 2 Lesson 7 *– Number line is optional*

Represent each of the following problems using both a number line diagram and an equation.

1. A bird that was perched atop a $15\frac{1}{2} $-foot tree dives down six feet to a branch below. How far above the ground is the bird’s new location?
2. Mariah owed her grandfather $\$2.25$ but was recently able to pay him back $\$1.50$. How much does Mariah currently owe her grandfather?
3. Jake is hiking a trail that leads to the top of a canyon. The trail is $4.2$ miles long, and Jake plans to stop for lunch after he completes $1.6$ miles. How far from the top of the canyon will Jake be when he stops for lunch?