Lesson 7: Addition and Subtraction of Rational Numbers

Problem Set

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

1. A bird that was perched atop a -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 but was recently able to pay him back . 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 miles long, and Jake plans to stop for lunch after he completes miles. How far from the top of the canyon will Jake be when he stops for lunch?
4. Sonji and her friend Rachel are competing in a running race. When Sonji is miles from the finish line, she notices that her friend Rachel has fallen. If Sonji runs one-tenth of a mile back to help her friend, how far will she be from the finish line?
5. Mr. Henderson did not realize his checking account had a balance of when he used his debit card for a purchase. What is his checking account balance after the purchase?
6. If the temperature is at p.m., and the temperature falls four degrees overnight, what is the resulting temperature?