

6.NS.5: Worksheet

Solutions

1. The Dead Sea is the lowest elevation on land at 427 meters below sea level. How would we represent this elevation using negative numbers? **-427 meters**
2. Jack bought the newest Nintendo game console and is now \$315 in debt. (Worth it?) How much money does Jack have? **-\$315**
3. One sunny day, Justin biked 3 miles due north. What would biking a negative number of miles mean in this situation? **Biking due south.**
4. When we describe an objects height in terms of its acceleration, we often use -9.8 meters per square second as standard gravity. Why do we use a negative number and not a positive one? **We want to represent objects falling down due to gravity, not going up.**
5. Angela has $-\$35.62$ in his bank account. What does this value tell us? What would a value of 0 mean in this situation? **Angela is \$35.62 in debt. A value of 0 would mean that she's perfectly broke; she neither has money nor owes money.**
6. The temperature in Chicago can get as low as 25°F below zero. How would we represent this temperature using negative numbers? **-25°F**
7. Protons and electrons have charges of $+1$ and -1 . What would a value of 0 mean in this situation? **A value of 0 would mean that a particle has no charge**
8. Water freezes into ice at 0°C and boils into steam at 100°C . Give three examples of three temperatures at which ice could exist. At what temperature is ice water? **Answers will vary. As long as they're negative numbers (e.g., -3°C , -15°C , and -98°C), they're acceptable. Ice water must be approximately 0°C .**
9. Death Valley has an elevation of 86 meters below sea level, and the top of Half Dome at Yosemite has an elevation of 2694 meters above sea level. Using the number line in Figure 1, find how many meters higher Half Dome is than Death Valley. **2780 meters**
10. To confuse her parents, Jackie tells them that she sold -8 teddy bears. What does this value mean? **Jackie actually bought 8 teddy bears.**