## Unit 5, Lesson 7: Adding and Subtracting to Solve Problems

1. Tyler orders a meal that costs $\$ 15$.
a. If the tax rate is $6.6 \%$, how much will the sales tax be on Tyler's meal?
b. Tyler also wants to leave a tip for the server. How much do you think he should pay in all? Explain your reasoning.
(from Unit 4, Lesson 10)
2. In a video game, a character is healed at a constant rate as long as they are standing in a certain circle. Complete the table.

| time in circle <br> (seconds) | health gained <br> (points) |
| :---: | :---: |
| 4 | 100 |
| 10 |  |
| 3 | 1,000 |

(from Unit 2, Lesson 3)
3. a. How much higher is 500 than 400 m ?
b. How much higher is 500 than -400 m ?
c. What is the change in elevation from $8,500 \mathrm{~m}$ to $3,400 \mathrm{~m}$ ?
d. What is the change in elevation between 8,500 m and -300 m?
e. How much higher is -200 m than 450 m ?

## (from Unit 5, Lesson 6)

4. The table shows four transactions and the resulting account balance in a bank account, except some numbers are missing. Fill in the missing numbers.

|  | transaction amount | account balance |
| :---: | :---: | :---: |
| transaction 1 | 360 | 360 |
| transaction 2 | -22.50 | 337.50 |
| transaction 3 |  | 182.35 |
| transaction 4 |  | -41.40 |

5. The departure from the average is the difference between the actual amount of rain and the average amount of rain for a given month.

The historical average for rainfall in Albuquerque, NM for June, July, and August is shown in the table.

| June | July | August |
| :---: | :---: | :---: |
| 0.67 | 1.5 | 1.57 |

a. Last June only 0.17 inches of rain fell all month. What is the difference between the average rainfall and the actual rainfall for last June?
b. The departure from the average rainfall last July was -0.36 inches. How much rain fell last July?
c. How much rain would have to fall in August so that the total amount of rain equals the average rainfall for these three months? What would the departure from the average be in August in that situation?

