### Lesson 17 Practice Problems

1. Describe a situation where each of the following quantities might be useful.
   1. -20 gallons per hour
   2. -10 feet per minute
   3. -0.1 kilograms per second
2. A bank charges a service fee of $7.50 per month for a checking account.

* A bank account has $85.00. If no money is deposited or withdrawn except the service charge, how many months until the account balance is negative?

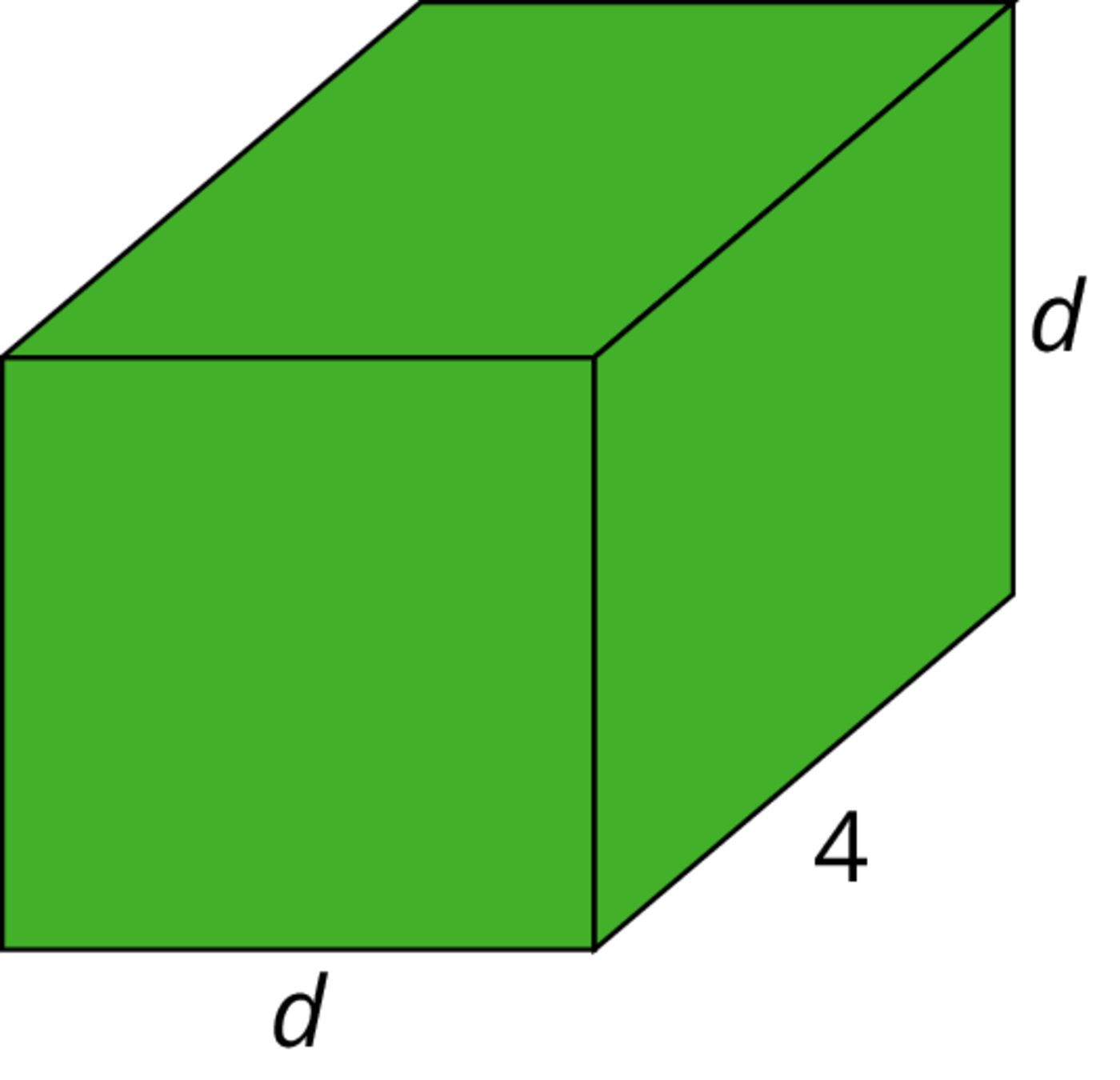
1. A submarine is searching for underwater features. It is accompanied by a small aircraft and an underwater robotic vehicle.

* At one time the aircraft is 200 m above the surface, the submarine is 55 m below the surface, and the underwater robotic vehicle is 227 m below the surface.
  1. What is the difference in height between the submarine and the aircraft?
  2. What is the distance between the underwater robotic vehicle and the submarine?
* (From Unit 7, Lesson 10.)

1. Evaluate each expression. When the answer is not a whole number, write your answer as a fraction.

* (From Unit 7, Lesson 16.)
  1. A restaurant bill is $21. You leave a 15% tip. How much do you pay including the tip?
  2. Which of the following represents the amount a customer pays including the tip of 15% if the bill was dollars? Select **all** that apply.
* (From Unit 6, Lesson 7.)

1. Consider a rectangular prism with length 4 and width and height .
   1. Find an expression for the volume of the prism in terms of .
   2. Compute the volume of the prism when , when , and when .

* 
* (From Unit 4, Lesson 15.)



© CC BY Open Up Resources. Adaptations CC BY IM.