### 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 If no money is deposited or withdrawn except the service charge, how many months until the account balance is negative?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.
	1. $-4⋅-6$
	2. $-24⋅\frac{-7}{6}$
	3. $4÷-6$
	4. $\frac{4}{3}÷-24$
* (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 $b$ dollars? Select **all** that apply.
	+ $15b$
	+ $b+0.15b$
	+ $1.15b$
	+ $1.015b$
	+ $b+\frac{15}{100}b$
	+ $b+0.15$
	+ $0.15b$
* (From Unit 6, Lesson 7.)
1. Consider a rectangular prism with length 4 and width and height $d$.
	1. Find an expression for the volume of the prism in terms of $d$.
	2. Compute the volume of the prism when $d=1$, when $d=2$, and when $d=\frac{1}{2}$.
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* (From Unit 4, Lesson 15.)



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