### Lesson 12 Practice Problems

1. The elevation of a submarine is shown in the table. Draw and label coordinate axes with an appropriate scale and plot the points.

| * time after noon (hours)
 | * elevation (meters)
 |
| --- | --- |
| * 0
 | * -567
 |
| * 1
 | * -892
 |
| * 2
 | * -1,606
 |
| * 3
 | * -1,289
 |
| * 4
 | * -990
 |
| * 5
 | * -702
 |
| * 6
 | * -365
 |

*
1. $30+-30=0$.
	1. Write another sum of two numbers that equals 0.
	2. Write a sum of three numbers that equals 0.
	3. Write a sum of four numbers that equals 0, none of which are opposites.
* (From Unit 7, Lesson 7.)
1. The $x$-axis represents the number of hours before or after noon, and the $y$-axis represents the temperature in degrees Celsius.
* 
	1. At 9 a.m., it was below freezing. In what quadrant would this point be plotted?
	2. At 11 a.m., it was $10^{∘}C$. In what quadrant would this point be plotted?
	3. Choose another time and temperature. Then tell the quadrant where the point should be plotted.
	4. What does the point $\left(0,0\right)$ represent in this context?
1. Solve each equation.
* $3a=12$
* $b+3.3=8.9$
* $1=\frac{1}{4}c$
* $5\frac{1}{2}=d+\frac{1}{4}$
* $2e=6.4$
* (From Unit 4, Lesson 4.)
1. Crater Lake in Oregon is shaped like a circle with a diameter of about 5.5 miles.
	1. How far is it around the perimeter of Crater Lake?
	2. What is the area of the surface of Crater Lake?
* (From Unit 5, Lesson 19.)
1. A type of green paint is made by mixing 2 cups of yellow with 3.5 cups of blue.
	1. Find a mixture that will make the same shade of green but a smaller amount.
	2. Find a mixture that will make the same shade of green but a larger amount.
	3. Find a mixture that will make a different shade of green that is bluer.
	4. Find a mixture that will make a different shade of green that is more yellow.
* (From Unit 5, Lesson 1.)



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