## 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 <br> noon <br> (hours) | elevation <br> (meters) |
| :---: | :---: |
| 0 | -567 |
| 1 | -892 |
| 2 | $-1,606$ |
| 3 | $-1,289$ |
| 4 | -990 |
| 5 | -702 |
| 6 | -365 |

2. $30+-30=0$.
a. Write another sum of two numbers that equals 0 .
b. Write a sum of three numbers that equals 0 .
c. Write a sum of four numbers that equals 0 , none of which are opposites.
(From Unit 7, Lesson 7.)
3. The $x$-axis represents the number of hours before or after noon, and the $y$-axis represents the temperature in degrees Celsius.

a. At 9 a.m., it was below freezing. In what quadrant would this point be plotted?
b. At 11 a.m., it was $10^{\circ} \mathrm{C}$. In what quadrant would this point be plotted?
c. Choose another time and temperature. Then tell the quadrant where the point should be plotted.
d. What does the point $(0,0)$ represent in this context?
4. Solve each equation.
$3 a=12$

$$
b+3.3=8.9
$$

$$
1=\frac{1}{4} c
$$

$5 \frac{1}{2}=d+\frac{1}{4}$
$2 e=6.4$
5. Crater Lake in Oregon is shaped like a circle with a diameter of about 5.5 miles.
a. How far is it around the perimeter of Crater Lake?
b. What is the area of the surface of Crater Lake?
(From Unit 5, Lesson 19.)
6. A type of green paint is made by mixing 2 cups of yellow with 3.5 cups of blue.
a. Find a mixture that will make the same shade of green but a smaller amount.
b. Find a mixture that will make the same shade of green but a larger amount.
c. Find a mixture that will make a different shade of green that is bluer.
d. Find a mixture that will make a different shade of green that is more yellow.

