PreAlgebra Lesson 2-1 Problem-Solving Practice Integers and Absolute Value

- 1. The surface of the Dead Sea is 1312 feet below sea level. Use an integer to express the surface of the Dead Sea in relation to sea level.
- 2. During a football game between the Eagles and the Bears, the quarterback of the Eagles was tackled for a loss of six yards. Use an integer to express the Eagles' new location on the football field in relation to their previous location.
- 3. The windchill factor, shown in the table below, indicates how much colder the wind feels than the actual outdoor temperature. How much colder does it feel when the outdoor temperature is 10°F and the wind is blowing at 10 miles per hour?

| Windchill Factor | | | | | | | | | |
|------------------|------------------|------------|---------|------------|---------|---------|---------|---------|--|
| Wind (mph) | Temperature (°F) | | | | | | | | |
| | 20 | 15 | 10 | 5 | 0 | - 5 | _ 10 | - 15 | |
| 5 | 13 | 7 | 1 | - 5 | - 11 | - 16 | - 22 | - 28 | |
| 10 | 9 | 3 | -4 | - 10 | - 16 | - 22 | - 28 | - 35 | |
| 15 | 6 | 0 | -7 | - 13 | - 19 | - 26 | - 32 | - 39 | |
| 20 | 4 | -2 | -9 | - 15 | - 22 | - 29 | - 35 | - 42 | |
| 25 | 3 | -4 | - 11 | - 17 | - 24 | - 31 | - 37 | - 44 | |
| 30 | 1 | - 5 | - 12 | - 19 | - 26 | - 33 | - 39 | - 46 | |
| 35 | 0 | -7 | - 14 | - 21 | - 27 | - 34 | - 41 | - 48 | |
| 40 | -1 | -8 | - 15 | _ 22 | - 29 | - 36 | - 43 | - 50 | |

4. One page in Maurice's check register looks like the following table. How do the total deposits compare with the total withdrawals?

| Description | Deposit | Withdrawal | Balance | | |
|-------------|---------|------------|---------|--|--|
| Movies | | \$15 | \$360 | | |
| Paycheck | \$300 | | \$660 | | |
| Gas | | \$25 | \$635 | | |
| Groceries | | \$50 | \$585 | | |
| Car | | \$150 | \$435 | | |

5. Joe keeps track of his golf scores by noting the difference between his score and par, the number of swings it should take the ball to descend into the hole. The scorecard shows Joe's scores from a recent round of golf.

| Big Lake Country Club | | | | | | | | | |
|-----------------------|----|----|----|----|----|----|----|----|----|
| Hole | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
| Par | 4 | 4 | 5 | 4 | 4 | 3 | 3 | 4 | 5 |
| Score | 2 | -1 | -1 | 1 | 0 | -2 | 1 | 0 | 2 |
| Hole | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
| Par | 4 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 5 |
| Score | 1 | 0 | 0 | -1 | 2 | 1 | -2 | 1 | -1 |

Compare Joe's scores on the 7th and 13th holes.

6. Refer to the information in Exercise 5. Write the scores for the 1st, 3rd, 4th, and 8th holes in the order from least to greatest.

