SIGNED INTEGER WORD PROBLEMS

1. The temperature at noon on a winter day was 8° C. At midnight, the temperature had dropped 15°. What was the temperature at midnight?

2. In 2001, Standard Register reported a net loss of $43.9 million. In 2002, the company had a net income of $33 million. How much more money did the company make in 2002 than in 2001? (Source: *Dayton Daily News*)

3. On a recent glider flight, Lucy took a tow to 3000 feet above ground level. She found a good thermal and climbed 1800 feet. Then she hit big sink and lost 2200 feet. What was her altitude at that point?

4. An architectural drawing of a building shows the elevation of the basement floor to be –12 feet. The elevation of the roof is 32 feet. What is the total distance from the roof to the basement floor?

5. One day in July, the temperature at ground level at the airport was 90°. A pilot reported the temperature at 10,000 feet was 50°. How much did the temperature drop **per 1000 feet?** (Hint: find the amount of temperature change and set up a proportion.)

1. –7°   2. $76.9 million   3. 2600 feet   4. 44 feet   5. 4°

6. The high temperatures for the first 5 days of January in Fargo, North Dakota are listed below. Find the average high temperature for these 5 days.

      Jan. 1 - $-4°$
      Jan. 2 - $+3°$
      Jan. 3 - $0°$
      Jan. 4 - $-6°$
      Jan. 5 - $+2°$

7. A football team gained 6 yards on a first down, lost 15 yards on the second down, and gained 12 yards on the third down. How many yards do they need to gain on the fourth down to have a 10 yard gain from their starting position?

8. While returning to the gliderport, Lucy descended for three minutes at a rate of 400 feet per minute. How much altitude did she lose? If her starting altitude was 2800 feet, what was her final altitude?

9. Carla's credit card statement showed that she owed $350. She made a payment of $200, then she charged $23 for gasoline. She returned a sweater she had charged earlier for a refund of $35. Then she charged $15 at the bookstore. What is her new balance?

10. In 2000, Bob's 401(k) fund lost $9000. In 2001, it lost another $10,000, and in 2002, it lost $17,000. In 2003, it gained $16,000, and in 2004 it gained $12,000. How much more does it have to gain to be worth what it was at the start of 2000?

6. $-1°$ 7. 7 yards   8. 1200 feet, 1600 feet   9. –$153   10. $8000