

WORD PROBLEMS WITH INTEGERS

All problems must show an expression and then a fully worked solution.

1. A nurse kept a log of a patient's mass during the weeks that he was in the hospital as is shown below. Use this information to determine his final mass

WEEK	1	2	3	4	5	6
Starting Mass: 84 kg	up 2 kg	lost 4 kg	up 2 kg	lost 1 kg	lost 3 kg	up 5 kg

2. The temperature is -3°C . As the day progresses, the temperature increases by 8°C , then drops by 6°C . Find the final temperature.
3. The temperature is 5°C . As a storm approaches, it drops by 7°C . As evening comes on, it drops another 3°C . Find the final temperature.
4. An elevator is on the 14th floor. The elevator descends 9 floors and then ascends 6 floors. On which floor is the elevator now?
5. A submarine is at a depth of 30 m. It descends another 20 m, then rises 40 m. What is the final depth?
6. The items on a company's balance sheet show these entries for income and expenses: income, \$25 000; wages, \$22 000; taxes, \$4 000; proceeds from sales, \$5 000. The profit is the difference between the income and the expenses. What is the profit?
7. The boiling point of nitrogen is -196°C and the boiling point of hydrogen is -253°C . What is the difference between these two boiling points?
8. The temperature in Quebec City was -3°C at 5:00 p.m. The average temperature drop was $2^{\circ}\text{C}/\text{hour}$ until 4:00 a.m.
- a) What was the total temperature change?
- b) What was the temperature at 4:00 a.m.?