Valentine's Day Word Problems (B)

Name: _____ Date: _____

Solve each problem in the space provided.

3. In science class, Lauren found out that her vital lung capacity (how much air she could push out in one breath) should be about 3.2 liters for her age. When she tested it, she found that it was actually 3.1 liters. For the Valentine's Day dance, she had to blow up 25 balloons that each held 5.7 liters of gas. In order to blow up all the balloons, how many breaths did she have to blow into balloons?

4. Valentine's Day morning in Chicago was a cold 10°F. By lunch, it had gone up 4°F. By supper, it had gone up a further 2°F. After supper, it had gone down 3°F. At bedtime, it had gone down a further 7°F. Overnight, the temperature dropped another 12°F. What was the temperature in the morning on the day after Valentine's Day?

Valentine's Day Word Problems (B) Answers

Name: _____ Date: _____

Solve each problem in the space provided.

3. In science class, Lauren found out that her vital lung capacity (how much air she could push out in one breath) should be about 3.2 liters for her age. When she tested it, she found that it was actually 3.1 liters. For the Valentine's Day dance, she had to blow up 25 balloons that each held 5.7 liters of gas. In order to blow up all the balloons, how many breaths did she have to blow into balloons?

Lauren could blow up a balloon with two breaths since $2 \times 3.1 > 5.7$. It would take $2 \times 25 = 50$ breaths to blow up the 25 balloons.
If Lauren used partial breaths, she could potentially fill up one balloon then use the remaining air to start the next balloon. In that case, she would need $5.7 \times 25 = 142.5$ liters of air which would be $142.5 \div 3.1 = 45.97$ or about 46 breaths.

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$10 + 4 + 2 - 3 - 7 - 12 = -6$°F
It was -6°F the morning after Valentine's Day.

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