Problems Of The Week
Due February 5

Make sure to review the guidelines before you start!

**Problem 1** Elizabeth visits her friend Andrew and then returns home by the same route. She always walks 2 km/h when going uphill, 6 km/h when going downhill, and 3 km/h when on level ground. If her total walking time is 6 hours, then what is the total distance she walks in km?

**Problem 2** A ladder leans against a vertical wall. The top of the ladder is 7m. above the ground. When the bottom of the ladder is moved 1m. farther away from the wall, the top of the ladder rests against the foot of the wall. What is the length of the ladder?

**Problem 3** Flora has an average of 56% on her first 7 exams. What should she have to make on her eighth exam to obtain an average of 60% on the 8 exams?

**Problem 4** Coming out of the grocery store, Ebree has eight coins, of which none is half-dollar, that add up to $1.45. Unfortunately, on the way home she loses one of them. If the chances of losing a quarter, dime or nickel are equal, which coin is most probably lost?

**Problem 5** Allie has an income which is five eighths that of Basil. Allie’s expenses are one-half those of Basil and Allie saves 40% of his income. What is the percentage of his income that Basil saves?