Word Problem Review

1. A swimming pool is 6m wide and 10m long, it is surrounded by a walkway of uniform width. The area of the walkway happens to equal the area of the pool. What is the width of the walkway?
2. A picture frame measures 18cm by 20cm, and of pictures shows. Find the width of the frame.
3. Find the dimensions of a rectangular rug whose perimeter is 20ft and whose area is 24.
4. How much of an 18% solution of sulfuric acid should be added to 360mL of a 10% solution to obtain a 15% solution?
5. How much pure anti-freeze must be added to 12L of a 40% solution of anti-freeze to obtain a 60% solution?
6. How many liters of pure acid must be added to 5L of a solution that is 20% acid to make a solution that is 60% acid.
7. A town’s old street sweeper can clean the streets in 60 hours. The old sweeper combined with the new sweeper can clean the streets in 15 hours. How long would it take the new sweeper to do the job alone.
8. In Swelly Dog Creek, Geri can row 60km downstream in 4 hours or she can row 36km upstream in the same amount of time. Find the rate she rows in still water and the rate of the current.
9. On the fishing trip Mr. Knepp goes 15 miles upstream and returns; he spends 8 hours in all. If the average rate of current is 2.5 mph, what is the average speed of Mr. Knepp’s boat in still water?