Junior Circle, Meeting 1, 9/27/09

Sharing and dividing

1. Anthony and Bret have equal amounts of money. Each of them has at least 5 dollars. How much should Anthony give to Bret so that Bret has 10 dollars more than Anthony?

2. Rita and Ella have picked some apples. Rita has 2 more apples than Ella. How many applies should Rita give to Ella so that in the end Ella has 2 more apples than Rita?

3. Jane and Kate together have 20 dolls. Jane has 6 more dolls than Kate. How many dolls does each girl have?

What if Jane and Kate together have 40 dolls and Jane has 6 more dolls than Kate?

In general, how do we find out how many dolls Kate has if Jane has 6 more dolls than Kate?

4. Alex and Ben together have 20 toy cars. Alex says that he has 5 more cars than Ben. Can this be the case? Why or why not?

5. Ada, Bella and Cindy have some books. Bella has one more book than Ada. Cindy has one more book than Bella. Together, the three of them have 18 books. How many does each girl have?

6. Jason and Paul were assigned to solve 5 math problems. Jason solved 2 problems. Paul solved 3 problems.

(a) Is it true that there is a problem that both of them solved?

(b) Is it true that together they have solutions to all the problems?

7. Jane and Paula were assigned the same 5 problems. Jane solved 3 problems. Paula solved 3 problems.

(a) Is it true that there is a problem that both of them solved?

(b) Is it true that together they have solutions to all the problems?

8. Draw a straight line on the face of an analog clock so that the sum of the numbers in each of the two parts is the same. Are there any other ways of dividing the clock so that the sum of the two parts is the same?