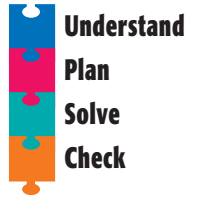


Problem Solving Strategy

Work Backward

NCTM Standards 1, 2, 5, 6, 7, 8, 9, 10



- 1 Vlad enjoyed inventing number tricks for his friends. He gave this one to Lecia.

- Pick a whole number.
- Add 10.
- Multiply by 3.
- Subtract 12.
- Divide by 3.
- Tell me your result, and I'll tell you your starting number

Lecia's result was 14. What was her starting number? _____

- 2 Vlad has a younger brother, Sergi. Sergi is half the age of their sister, Katya. Katya is two years older than their sister, Sonya. Sonya is half Vlad's age. Vlad is 16. How old is Sergi? _____

- 3 Abby, Belinda, Charles, and Ernie each brought some cars to Dante's house. They decided to make teams of their cars and have races. When they put the cars together, they noticed that Abby had one more car than Charles, Belinda had one more than Abby, Dante had one more than Belinda, and Ernie had one more than Dante! When they shared their cars, each friend had 5 cars for their team. How many cars did each of the friends have at first?

Abby: _____ cars Belinda: _____ cars Charles: _____ cars

Dante: _____ cars Ernie: _____ cars