1. Half the sum of two numbers is $-\frac{1}{2}$. Half their difference is $\frac{3}{2}$. Find the numbers.

2. The measure of one of two supplementary angles is 6 degrees less than twice that of the other. How large are the angles?

3. Four years ago a woman was three times as old as her daughter. Six years from now, she will be twice as old as the girl. How old are the woman and her daughter now?

4. Tickets for a high school play sold at \$4.00 for the main floor and \$2.75 for the balcony. If the receipts from the sale of 1600 tickets was \$5525, how many tickets were sold at each price?

5. There are 29 students in an English class. The number of girls in the class is one less than three times one half the number of boys. How many girls are there in the class and how many boys are there in the class?

6. A collection of nickels and dimes has a total value of \$2.40 and contains 35 coins. How many of each kind of coin are there in the collection?

7. Flying with the wind, an airplane can travel 1080 miles in six hours. Flying against the wind it goes only $\frac{1}{3}$ the distance in half the time. Find the speed of the plane in still air and the speed of the wind.

8. The sum of the digits of a two digit number is 10. The number is one less than twice the number represented when the order of the digits is reversed. Find the two digit number.

9. Find the values of a and b so that the points $(2, 17)$ and $(-1, 2)$ are both on the function $y = ax^2 + b$.

Ready for a challenge? Try this one.

10. Andy and Bill can do a piece of work together in 30 days. After they have both worked 12 days, Bill is called away and Andy finishes the job alone in 24 more days. How many days would it take for each of them to do the job by themselves?