# Problem Set: Due Wednesday <br> Complete on loose-leaf and show all work. 

## Traveling Salesman

A salesman sold twice as many cars this year than last year. If she sold 78 cars in the past two years, how many cars did she sell last year?

## Apple Picking

Marc, Betsy, and Mary were picking apples. Mary picked twice as many as Marc. Betsy picked 2 kg more than Marc. Together the three of them picked 23 kg of apples. How many kilograms did each of them pick?

## Bookworm

Franchesca finished $2 / 3$ of a book. She estimated that she finished 40 more pages than she has yet to read. How long is her book?

## Farm Tractor

A farming field can be ploughed by 6 tractors in 4 days. When 6 tractors work together, each of them ploughs 120 hectares a day. If two of the tractors were moved to another field, then the remaining 4 tractors could plough the same field in 5 days. How many hectares a day would one tractor plough then?

## Strange Number

A student chose a number, multiplied it by 3 , then subtracted 138 from the result and got 102. What was the number he chose?

## Stranger Number

I chose a number and divide it by 5 . Then I subtracted 204 from the result and got 6 . What was the number I chose?

## Meet in the Middle

The distance between two towns is 260 km . At the same moment, a passenger car and a truck start moving towards each other from different towns. They meet 4 hours later. If the car drives $5 \mathrm{~km} / \mathrm{hr}$ faster than the truck, what are their speeds?

## Rectangular Area

One side of a rectangle is 5 cm shorter than the other side. If we increase the length of each side by 1 cm , then the area of the rectangle will increase by $18 \mathrm{~cm}^{2}$. Find the lengths of all sides.

