Math 2 Worksheet #2
Applications

David drove from his home in Raleigh to the beach at Cape Hatteras for his vacation. He drove for an hour and a half at 50 miles per hour. When he realized that soon it would be too dark to set up his tent at he campground, he sped up to 55 miles per hour. He drove the rest of the 174 mile trip at that speed. How long did he drive 55 miles per hour?

    let t stand for the length of the time he drove at 55 miles per hour

    Total distance = distance at 50 mph + distance at 55 mph

1) Write the equation.
2) Sovle for t.

Alan bought 5 pounds of peanuts for $2.50 per pound. He also bought cashews for $6.00 per pound. If Alan spent $30.50, how many pounds of cashews did he buy?

    Let p=pounds of cashews

    Total spent = # of lbs. of peanut times price per lb. + # of lbs. of cashews times price per lb.

3) Write the equations.
4) Solve for p.

It takes Kay 20 minutes to drive to work traveling 45 mph. Two minutes after she left home this morning, her husband, Dan, started out with briefcase, which she had forgotten. If Dan arrived at Kay's office just as she did, how fast did he drive? **D=rt**

    (rate)(time) = (rate)(time – 2)

5) Write the eqution.
6) Find the rate/speed which Dan was driving.

The sum of two consecutive odd integers is 124. What are the integers?
7) Write the equation for finding 2 consecutive odd intgers.
8) What are the 2 numbers?

You have $32 to spend on supplies for your science fair project. If you buy 2 plants for experiments, you will have $18 left for other supplies. How much is each plant?

    Amount on plants + amount of other supplies = total amount

9) Write the equation for finding the amount of each plant.
10) How much is each plant?

Mrs. Camp was 24 years old when Brittany was born. In 3 years from now the sum of their ages will be 68 years old. How old is each now?
Let Brittany = x and Mrs. Camp = x + 24
(Mrs. Camp is 3 years) + (Brittany in 3 years) = 68
11) Write the equation and solve.
12) How old is Brittany now: _____
13) How old is Mrs. Camp now: _____