Fraction Problems

(1) If it takes Betty 5 hours to walk 9 miles, how far will she have walked in 3 hours? (Assume that she walks at a constant rate.)

(2) Mary was making a skirt. She had $3\frac{2}{5}$ yards of material. She used $\frac{3}{4}$ of the material for the main part of the skirt, and then she used $\frac{2}{3}$ of what was left for a stylish belt. How much material was left?

(3) John's teacher gave him a large sheet of red construction paper to make paper toys. If John used $\frac{2}{7}$ of the sheet for a cart and $\frac{3}{5}$ of the sheet for a tent, what fraction of the sheet of paper was left?

(4) Three-sevenths of a class is girls. If there are 20 boys in the class, how many girls are in the class?

(5) If $\frac{5}{8}$ of a pound of apples cost $2.35, how much would $1\frac{1}{2}$ pounds of these apples cost?

(6) Five rectangular cakes are to be divided into portions with each portion being $\frac{3}{5}$ of a cake. How many portions are possible?

(7) If the ratio of girls to boys in a class is 4 to 5 and there are 25 boys, girls form what fraction of the class?

(8) Katie can mow $\frac{3}{5}$ of the lawn in $\frac{1}{4}$ of an hour. How long will it take Katie to mow the whole lawn?

(9) It takes Bill 2 hours to correct the essays that his students wrote in class. The substitute teacher, Dave, takes 3 hours to do the same job. If they both work together until all the essays are corrected, how long will it take to do this job?

(10) A teacher uses $\frac{2}{3}$ of her yearly supply of construction paper during the first quarter. She then uses $\frac{5}{7}$ of what's left during the second quarter. During the third quarter, she uses $\frac{3}{4}$ of what she has left (from the end of the second quarter). How much construction paper does the teacher have left for the fourth quarter of the school year?

(11) I am a four-digit number divisible by 5. My first three digits are divisible by 4. The sum of my digits is 11. There is a 3 in my hundreds place. Who am I?

(12) Using rectangular cakes, show how to carry out each calculation below:

(a) $\frac{2}{3}+\frac{1}{8}$ (b) $\frac{3}{4}\cdot\frac{5}{6}$