Homework 25.

1. In a mix of dried fruits, there are 7 parts dried apples, 4 parts dried pears, and 5 parts dried apricots, which means they should be mixed in the ratio 7:4:5. What is the weight, in grams, of the apples, pears, and apricots in the fruit mix if the total weight is 1600g?

2. The ratio of roses to hibiscuses in the garden is 9:11. If there are 99 rose bushes, what is the total number of flower bushes in the garden?

3. Winnie the Pooh can eat 10 kg of honey in 4 hours, and Little Piglet can eat 10 kg of honey in 5 hours. How much honey can they eat together in 3 hours?

4. The difference between two numbers is $8\frac{1}{2}$, and their sum is 17. How many times is one number bigger than the other?

5. Solve the equations:

a. $5\frac{1}{4} \cdot x = \frac{7}{8}$;   b. $c : 1\frac{11}{16} = \frac{4}{9}$;   d. $1\frac{2}{3} : x = 2\frac{7}{9}$;   e. $4\frac{2}{9} = 6\frac{1}{3} \cdot k$

6. Evaluate (answer is $4\frac{3}{4}$):

$$\frac{9}{10} \cdot 1\frac{1}{14} : 2\frac{4}{7} \cdot 24 - 2\frac{4}{15} : \left(1\frac{1}{5} - \frac{2}{3}\right);$$

7. m is a positive number less than 1. (We can write $0 < m < 1$). Compair:

a. $10 \ldots 10 \cdot m$;   b. $10 \ldots 10 : m$;

8. A bus carrying 4th-grade students started its journey to a field trip from Stony Brook at 9 am, moving at a speed of 54 km/h. After $2\frac{1}{3}$ hours, Robert's father realized that Robert had forgotten his sleeping bag, so he jumped into his car and started going after the bus at a speed $1\frac{4}{9}$ times higher than the speed of the bus. When will he catch the bus?