A...WHat...DiagraM? A...WHo....LiNe?:

TackLiNg tHe Tape DiagraM aNd DoubLe NuMber LiNe!

A tape diagram is an effective way to model a ratio when the two quantities in the ratio have the same units. These visual models will help you solve a ratio problem quickly and easily. Tape diagrams have been described as looking like a segments from a tape measure.

Let's do an example problem:

1A. In Mr. Smith's train, the ratio of male to female passengers is 4 : 3. There are a total of 28 passengers. How many females are on the train?

1B. In August, Emily's clothing store sold a total of 460 shirts with the ratio of short sleeves to long sleeves being 3 : 7. How many short sleeve shirts were sold?

2A. At a farm the ratio of cows to horses was 7 : 2. If there were 21 cows at the farm, how many horses were there?

2B. The ratio of yellow socks to blue socks in Andy's sock drawer is 8 : 3. If Andy has 15 blue socks in his drawer, how many yellow socks does he have?

3A. Daisy and Rosie scored baskets in a basketball game in a ratio of 4 : 1. Daisy scored 12 more baskets than Rosie. How many baskets did Daisy score?

3B. Ollie won 2 games for every 5 games that Noelle won. If Noelle won 15 more games than Ollie over the weekend, how many games did Ollie win?