

## Using the Singapore Method with Fractions

Recall the Singapore Method for solving problems:

1. Read the entire problem.
2. Decide **who** is involved in the problem.
3. Decide **what** is involved in the problem with relation to the “who”.
4. Draw unit bars (or a single unit bar) of **equal length**.
5. Read each sentence, one at a time, and put the information into the unit bars, adding parts on, taking away parts, and dividing parts up as necessary to adequately express the given information. (For fraction problems, we are going to be dividing parts up!)
6. Identify the part that is being sought and mark it somehow, usually with a question mark.
7. Work the computation to the side or underneath the drawings.
8. Make sure the answer makes sense and answers the question being asked. Answering the question in a complete sentence helps with this.

**Example 1:** Jackson has a bag of marbles. Three-fifths of his marbles are red and the rest are blue. If he has 6 blue marbles, how many red marbles does he have?

**Who:**

**What:**

**Unit Bar:**

The unit bar represents all of Jackson’s marbles. We need to split it up into red and blue sections.

What fraction represents the amount of red marbles? \_\_\_\_\_

What fraction represents the amount of blue marbles? \_\_\_\_\_

How many blue marbles are there to be split amongst the “blue” parts in the bar above? \_\_\_\_\_

So, what number goes in each of the parts in the bar above? \_\_\_\_\_

Therefore, Jackson has \_\_\_\_\_ red marbles.

**Example 2:** Donna owns 36 DVDs,  $\frac{3}{4}$  of which are dramas. How many drama DVDs does she own?

**Who:**

**What:**

**Unit Bar:**

This time, we know the value of the whole bar – 36.

**Example 3:** In a mathematics class, 18 students made an A on the first test. If this is two-thirds of the class, how many students are in the class?

**Who:**

**What:**

**Unit Bar:**

**Example 4:** Nancy has 6 cats,  $\frac{1}{3}$  of which are female. What fraction of her cats are male?

**Who:**

**What:**

**Unit Bar:**

**Example 5:** A particular laptop computer is made in either white or black. A store's inventory is currently  $\frac{4}{7}$ , or a total of 12, black laptop computers. How many white laptop computers are there in the store's inventory?

**Who:**

**What:**

**Unit Bar:**

**Example 6:** A bookstore has 3000 books,  $\frac{5}{8}$  of which are hardback. How many books are hardback?

**Who:**

**What:**

**Unit Bar:**