

In order to solve this problem, we need to find a common denominator for  $1/4$  and  $2/3$ .

The lowest common multiple of 3 and 4 is 12, so we need to convert both fractions to twelfths.

$$1/4 \times 3 = 3/12$$

$$2/3 \times 4 = 8/12$$

Now we can add the fractions together and whatever the difference is between the fraction of girls that we have (short and medium hair) and the whole ( $12/12$ ) will be our fraction of girls with long hair.

$$3/12 + 8/12 = 11/12$$

$$12/12 - 11/12 = 1/12$$

$1/12$  of the girls in the class have long hair.

In order to find the answer to part b we need to convert  $1/12$  into thirty-sixths. We can do this by multiplying it by 3.

$$1/12 \times 3 = 3/36$$

We now know that there will be 3 girls with long hair in a class of 36 girls.

- a)  **$1/12$**   
b) **3 girls have long hair**