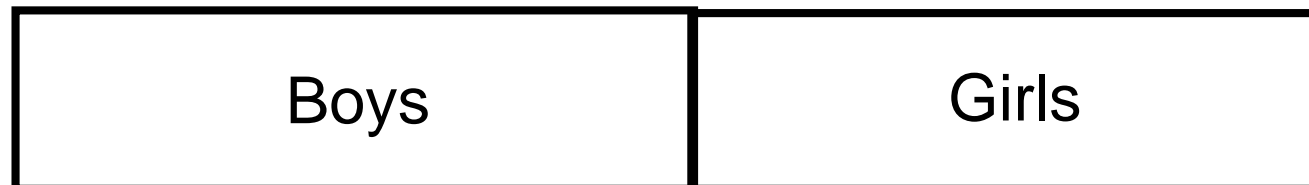


# Bar Models and the Four Operations

## Addition and Subtraction

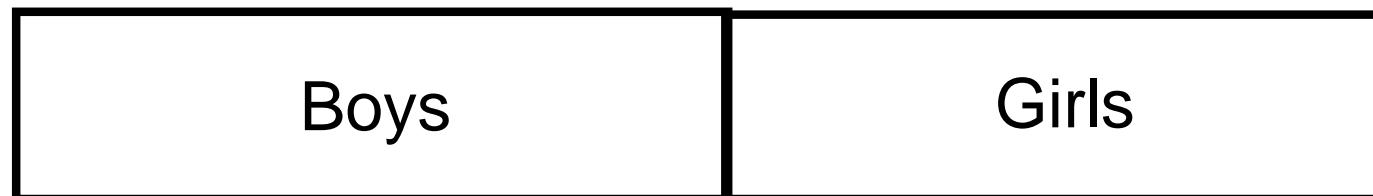
134 boys and 119 girls took part in an art competition.  
How many children took part in the competition?



# Bar Models and the Four Operations

## Addition and Subtraction

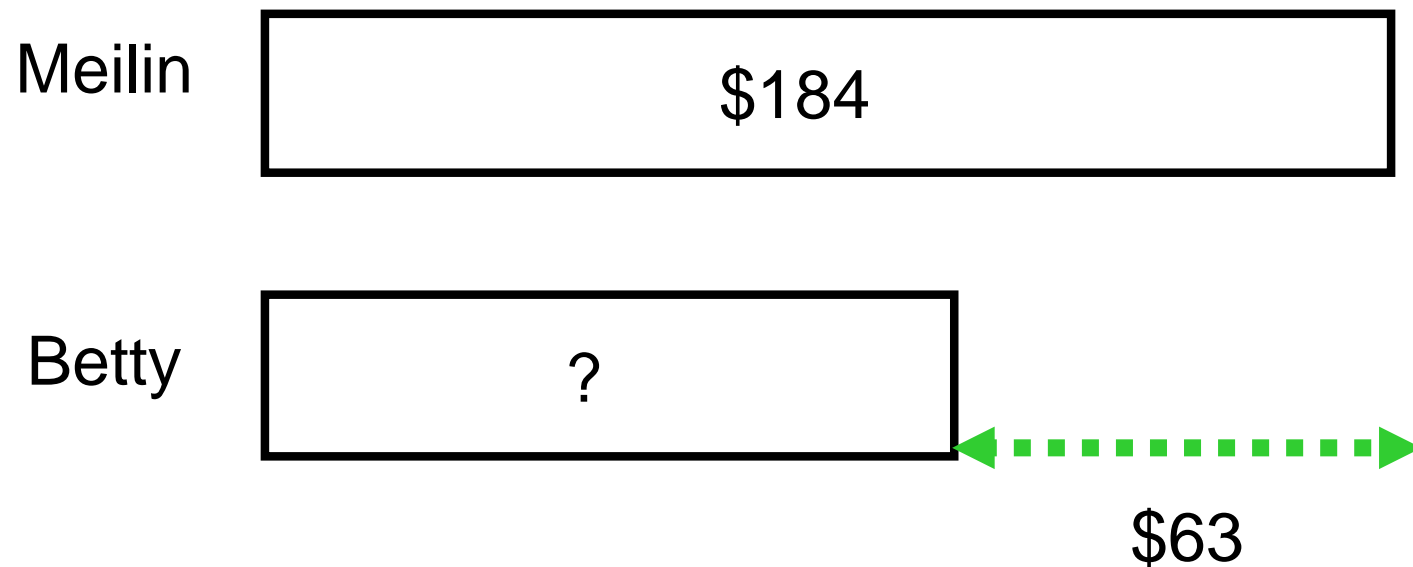
253 children took part in an art competition. If there were 134 boys, how many girls were there?



# Bar Models and the Four Operations

## Addition and Subtraction

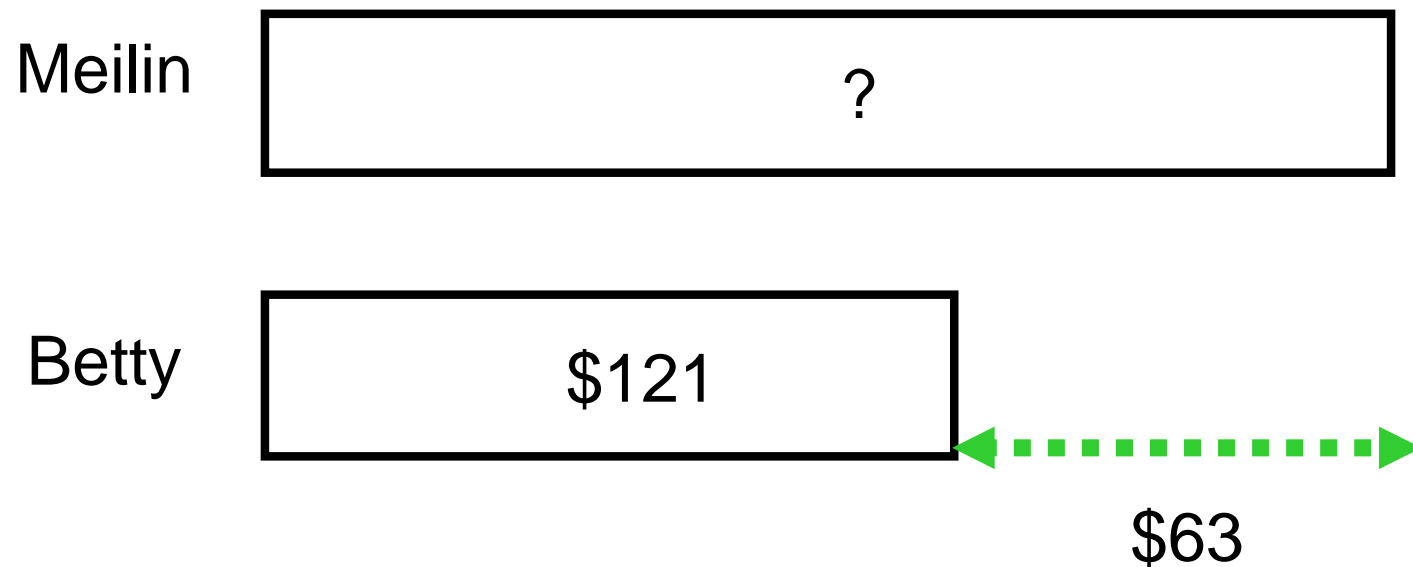
Meilin saved \$184. Betty saved \$63 less than Meilin. How much did Betty save?



# Bar Models and the Four Operations

## Addition and Subtraction

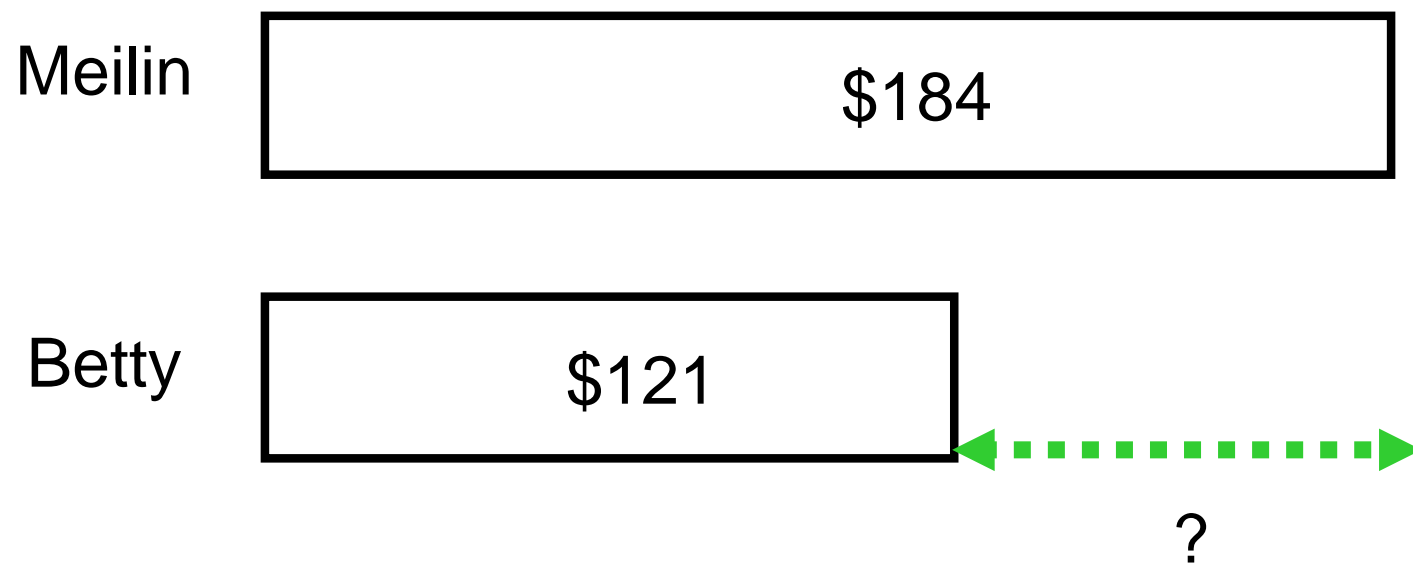
Betty saved \$121. She saved \$63 less than Meilin. How much did Meilin save?



# Bar Models and the Four Operations

## Addition and Subtraction

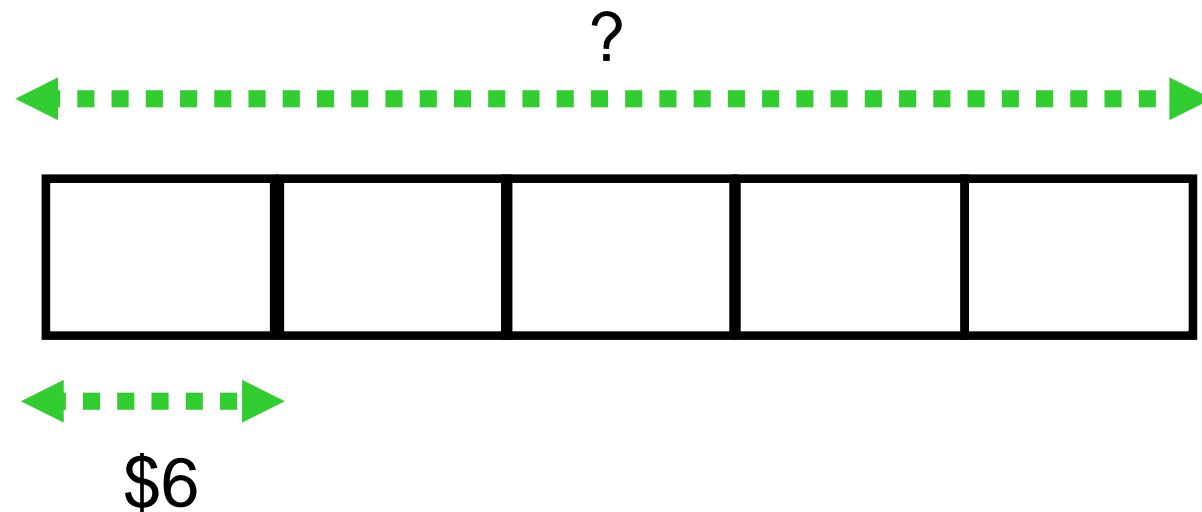
Meilin saved \$184. Betty saved \$121. How much less than Meilin did Betty save?



# Bar Models and the Four Operations

## Multiplication and Division

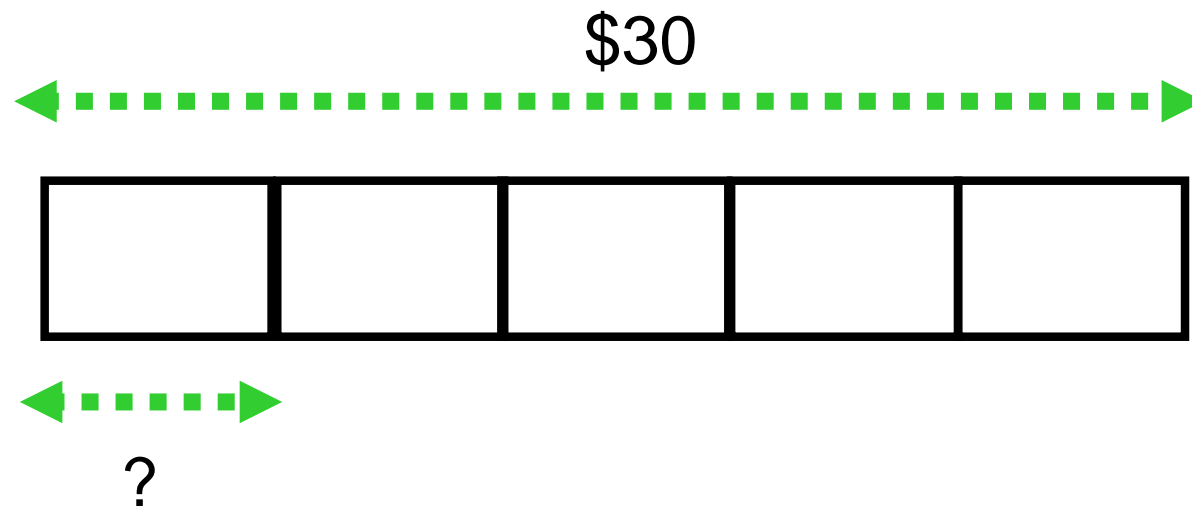
5 children shared the cost of a present equally. Each of them paid \$6. What was the cost of the present?



# Bar Models and the Four Operations

## *Multiplication and Division*

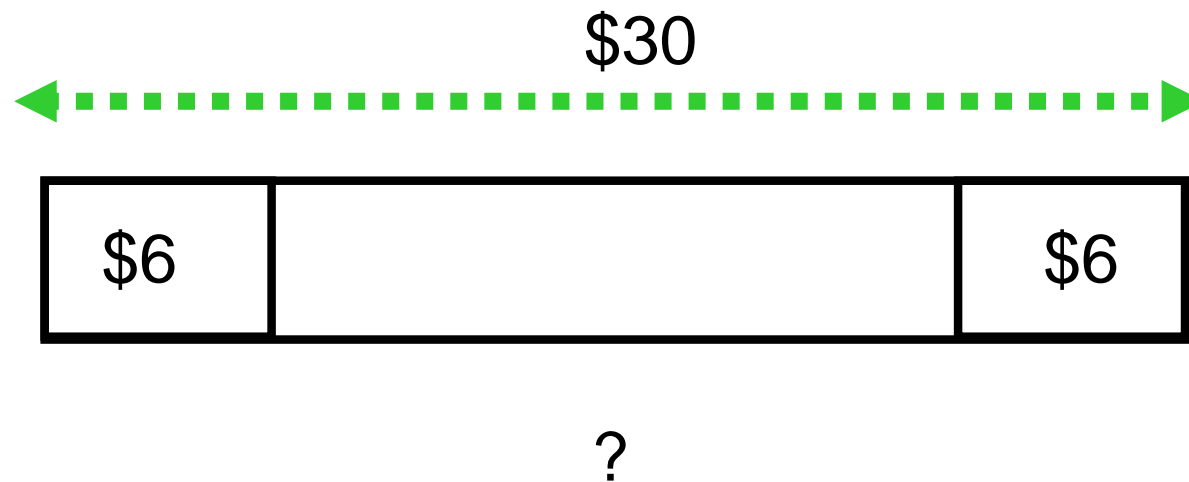
5 children bought a present for \$30. They shared the cost equally. How much did each child pay?



# Bar Models and the Four Operations

## Multiplication and Division

A group of children bought a present for \$30. They paid \$6 each. How many children were there in the group?

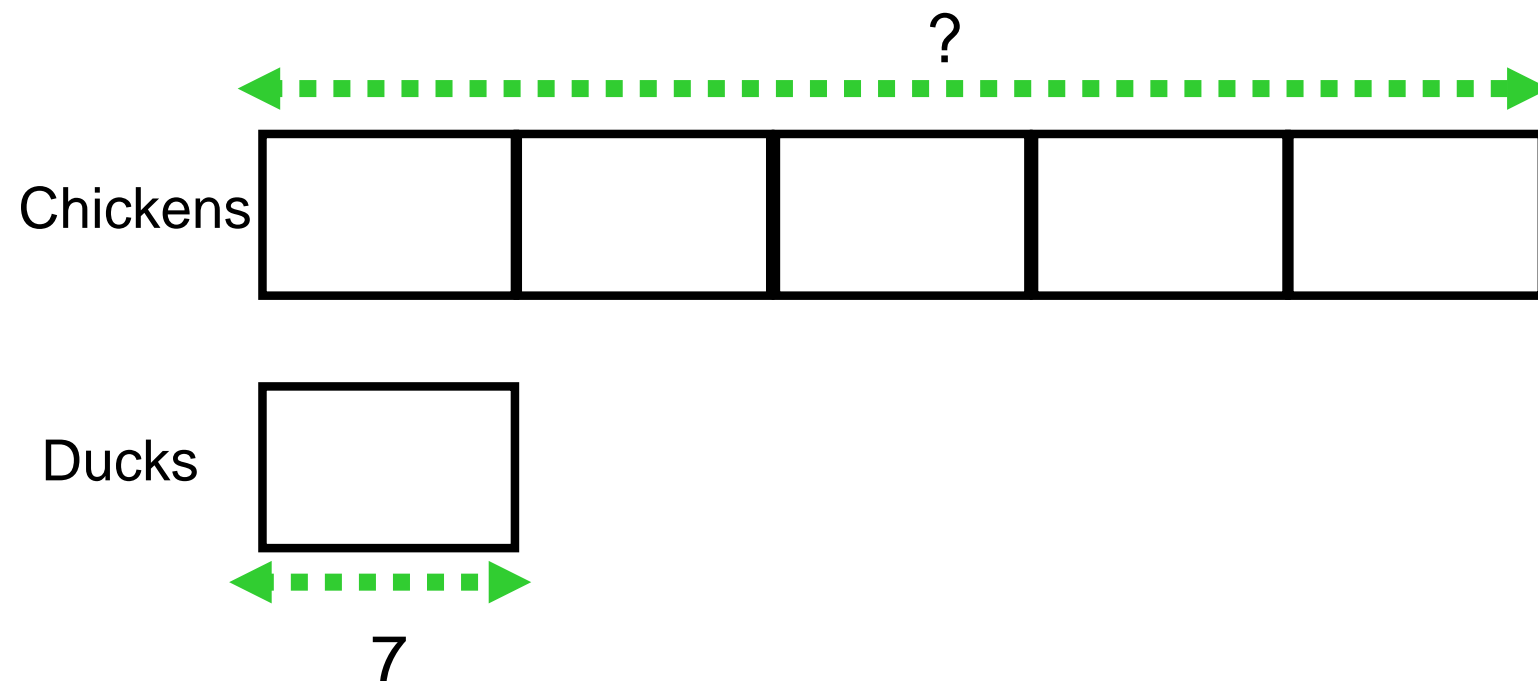




# Bar Models and the Four Operations

## Multiplication and Division

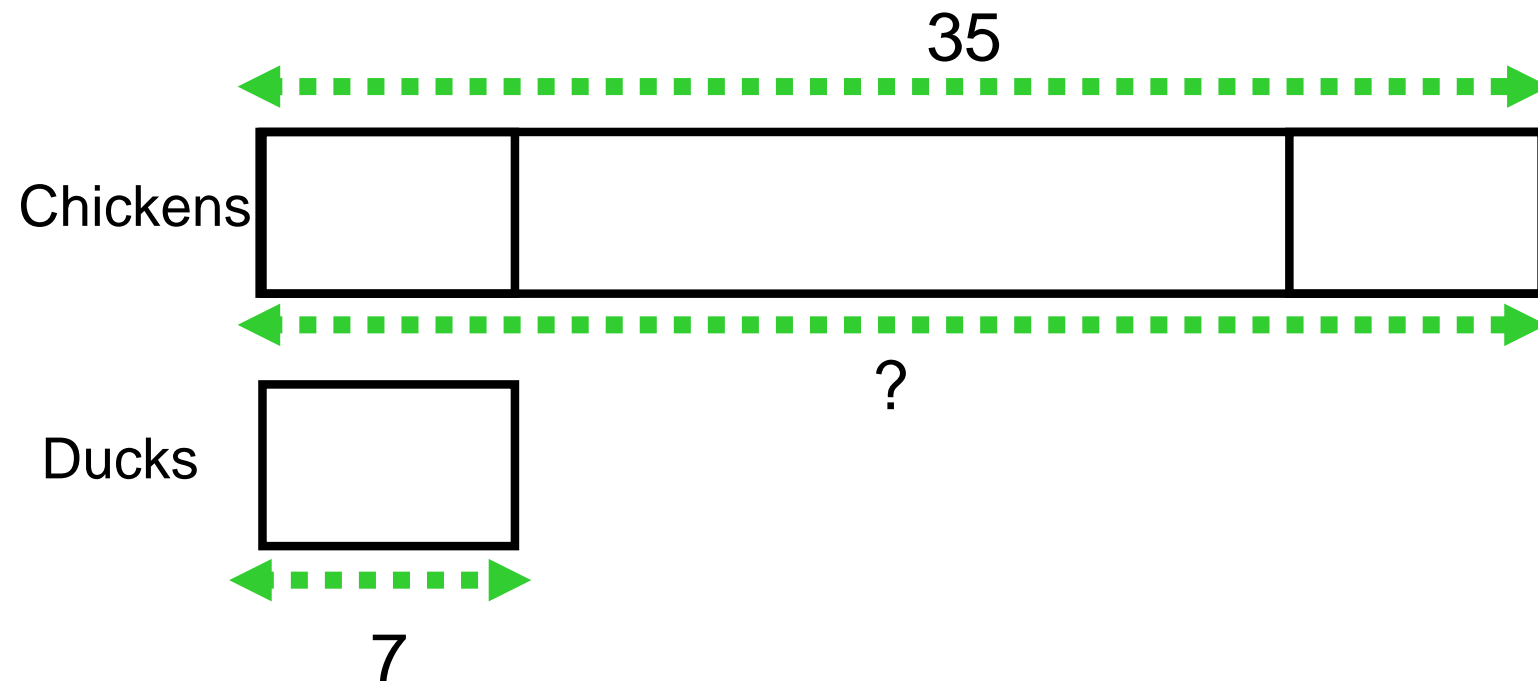
A farmer has 7 ducks? He has 5 times as many chickens as ducks. How many chickens does the farmer have?



# Bar Models and the Four Operations

## Multiplication and Division

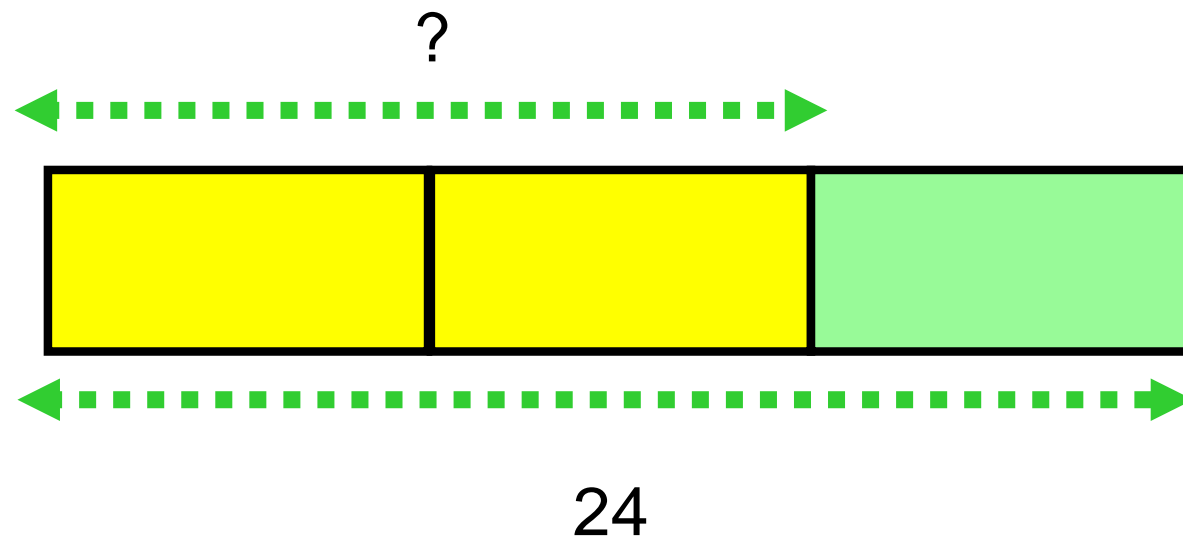
A farmer has 7 ducks and 35 chickens. How many times as many chickens as ducks does he have?



# Bar Models and Fractions, Ratio and Percentage

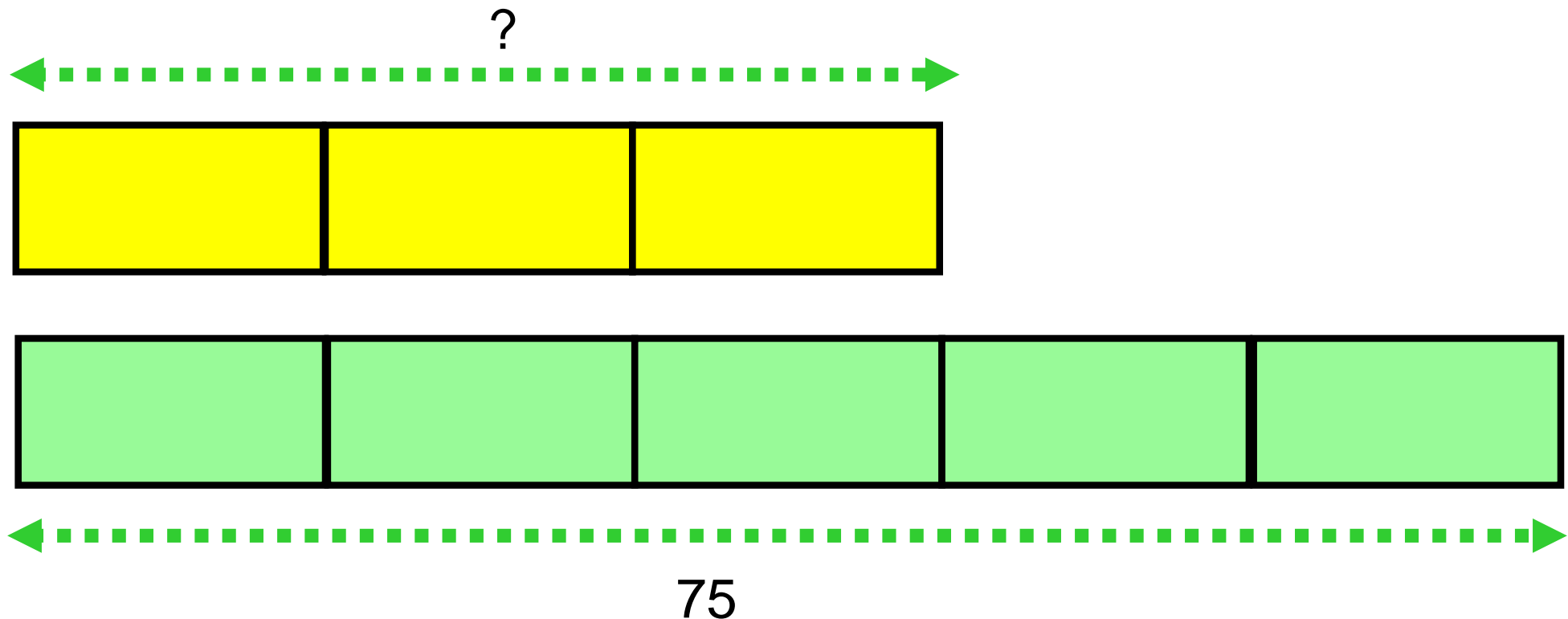
## Fractions

Salmah bought 24 flowers,  $\frac{2}{3}$  of them were white. How many white flowers were there?



## Bar Models and Fractions, Ratio and Percentage

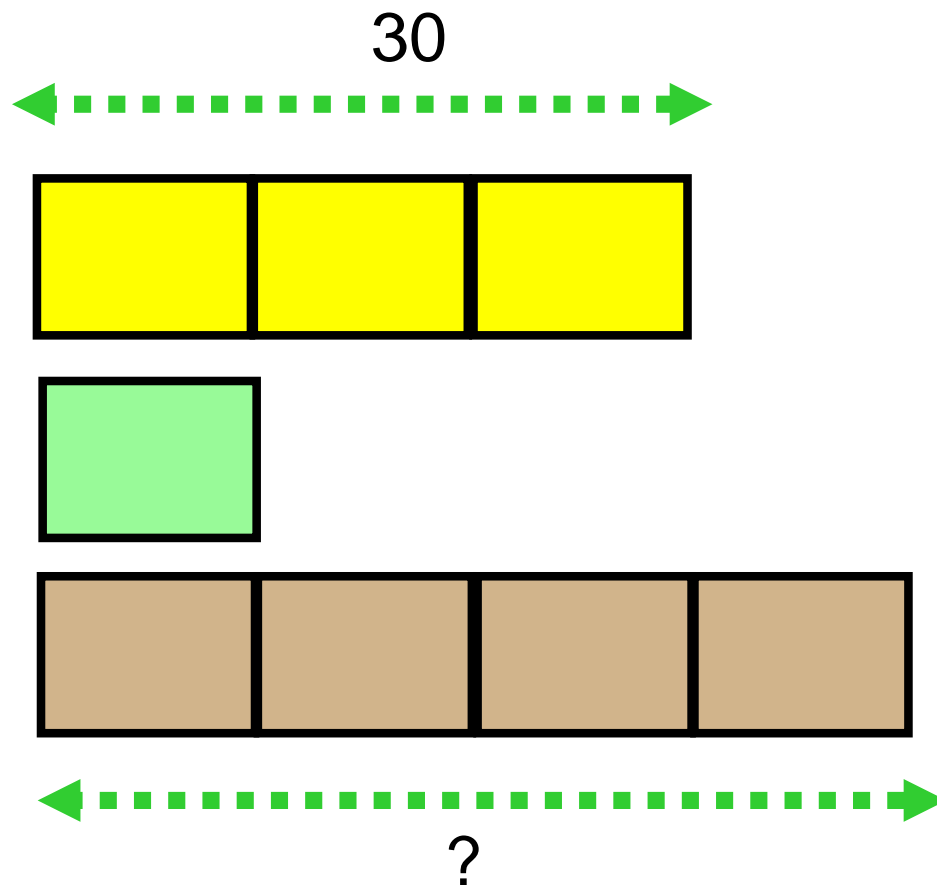
There are  $\frac{3}{5}$  as many boys as girls. If there are 75 girls, how many boys are there?



## Bar Models and Fractions, Ratio and Percentage

### Ratio

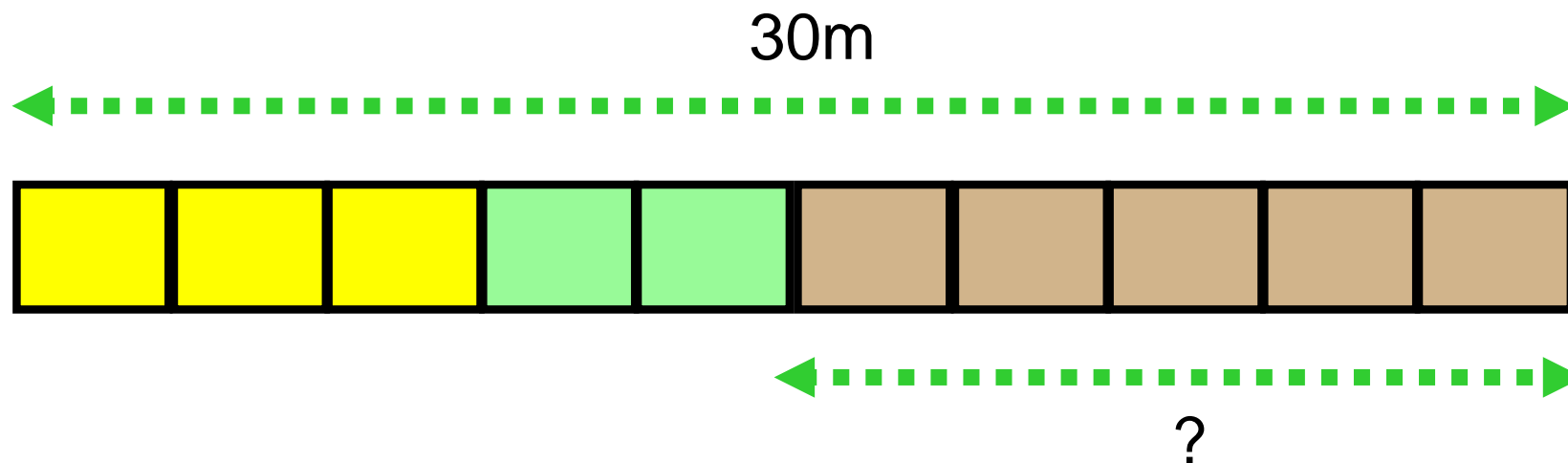
The ratio of the number of pies to the number of cakes to the number of buns is 3:1:4. If there are 30 pies, how many buns are there?



## Bar Models and Fractions, Ratio and Percentage

### Ratio

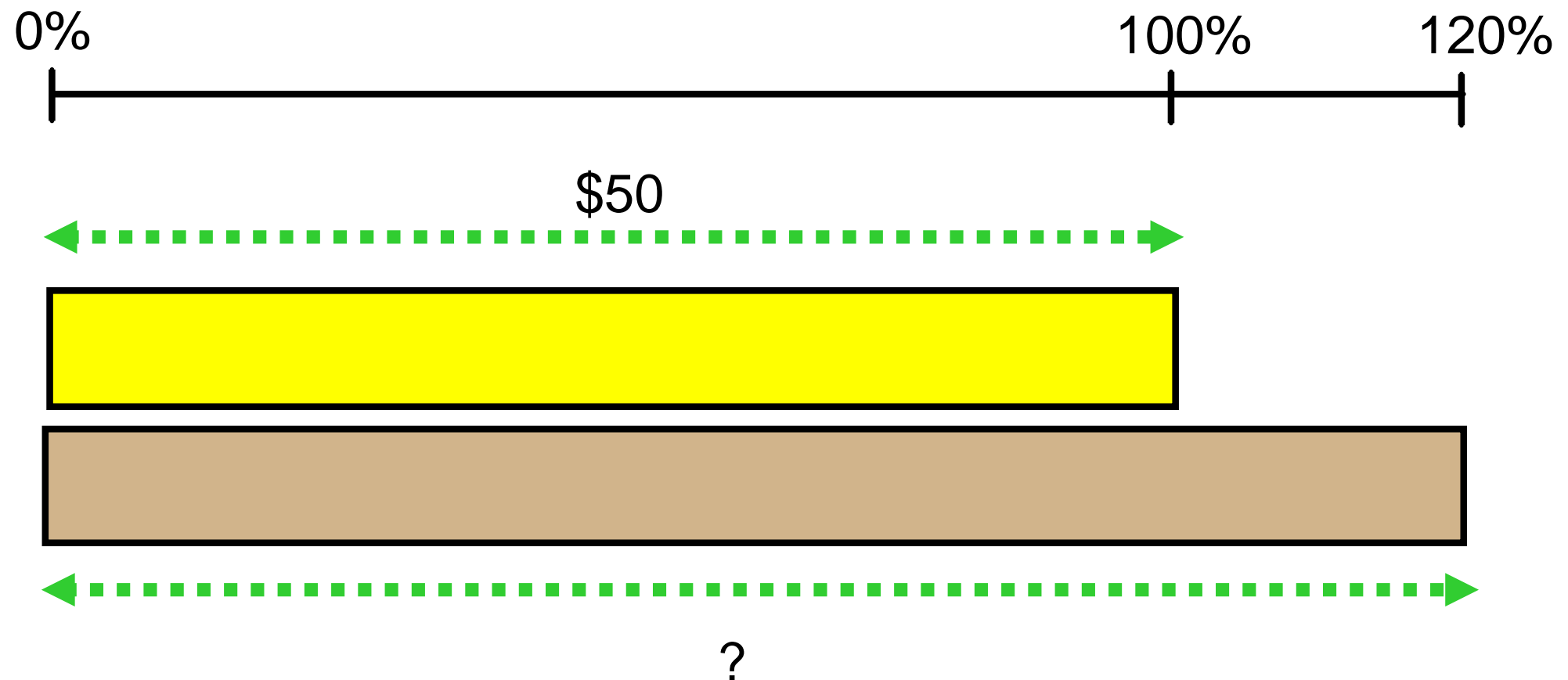
Max cut a piece of ribbon 30m long into three pieces in the ratio 3:2:5? What was the length of the longest piece?



## Bar Models and Fractions, Ratio and Percentage

### Percentage

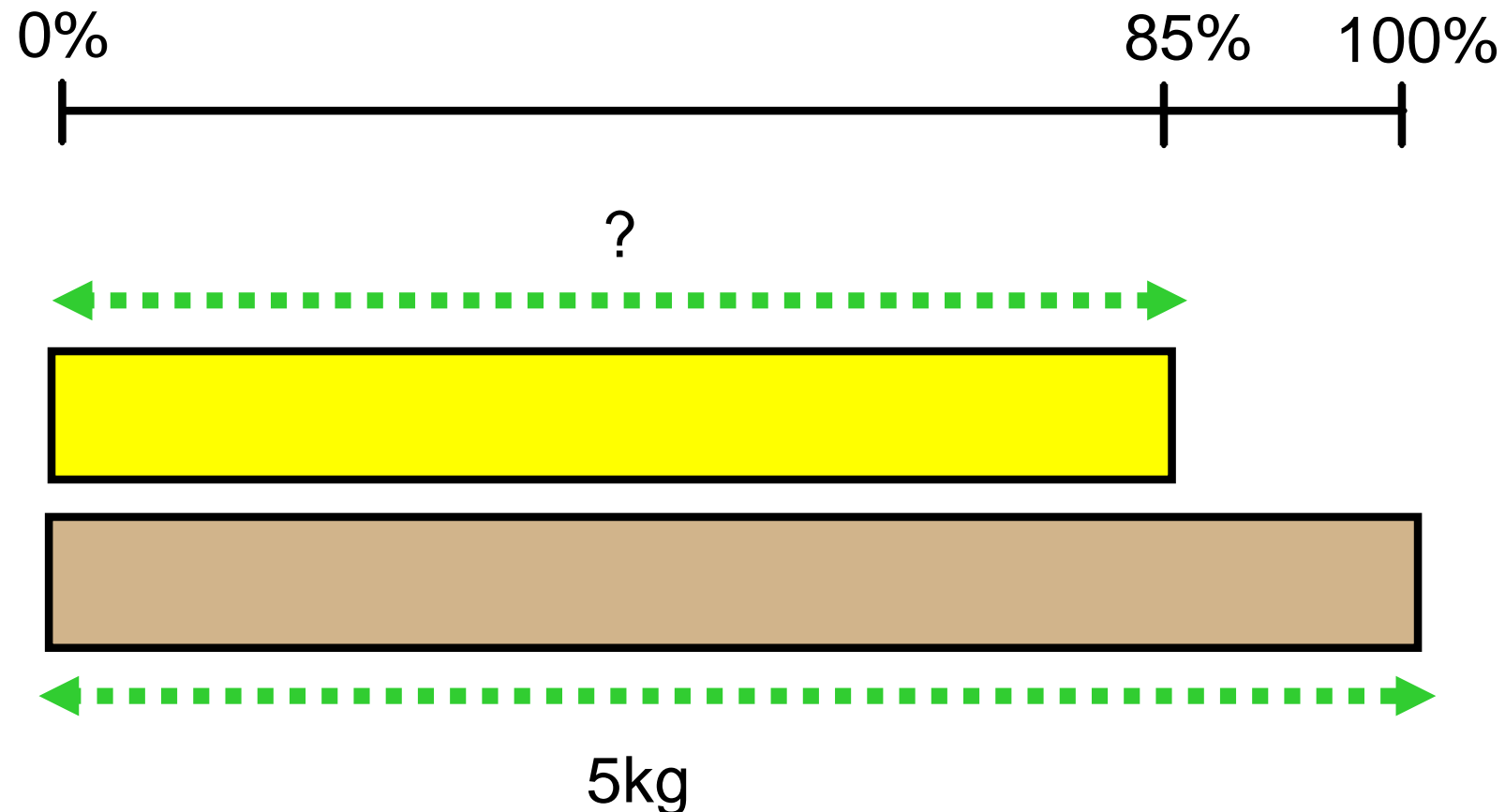
Ali has \$50. Rahmat has 20% more money than Ali. How much money does Rahmat have?



## Bar Models and Fractions, Ratio and Percentage

### Percentage

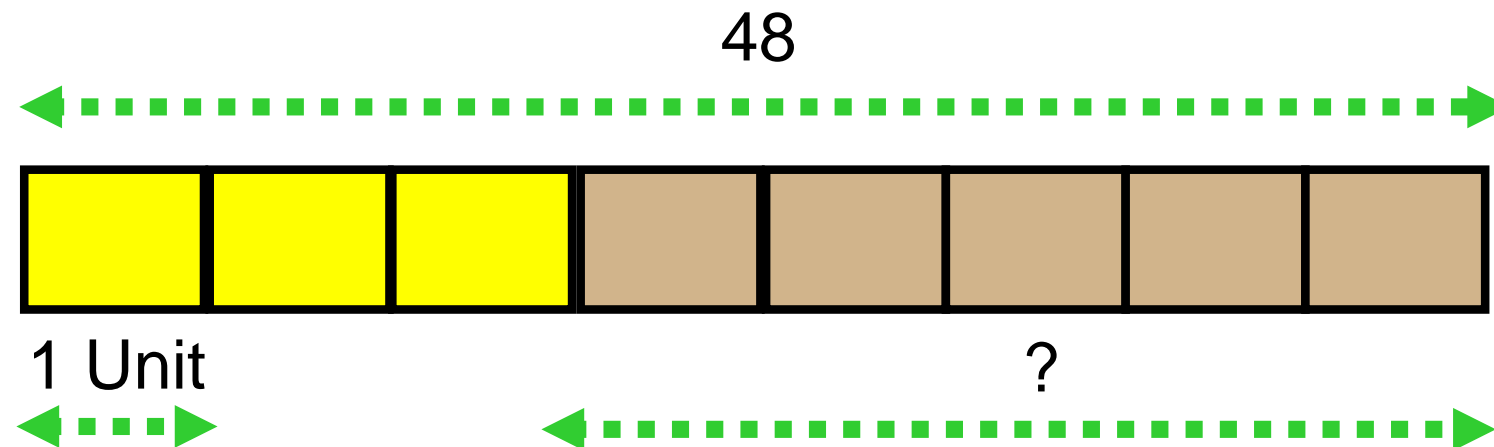
Parcel A weighs 5kg. Parcel B is 5% lighter than parcel A.  
Find the mass of parcel B?





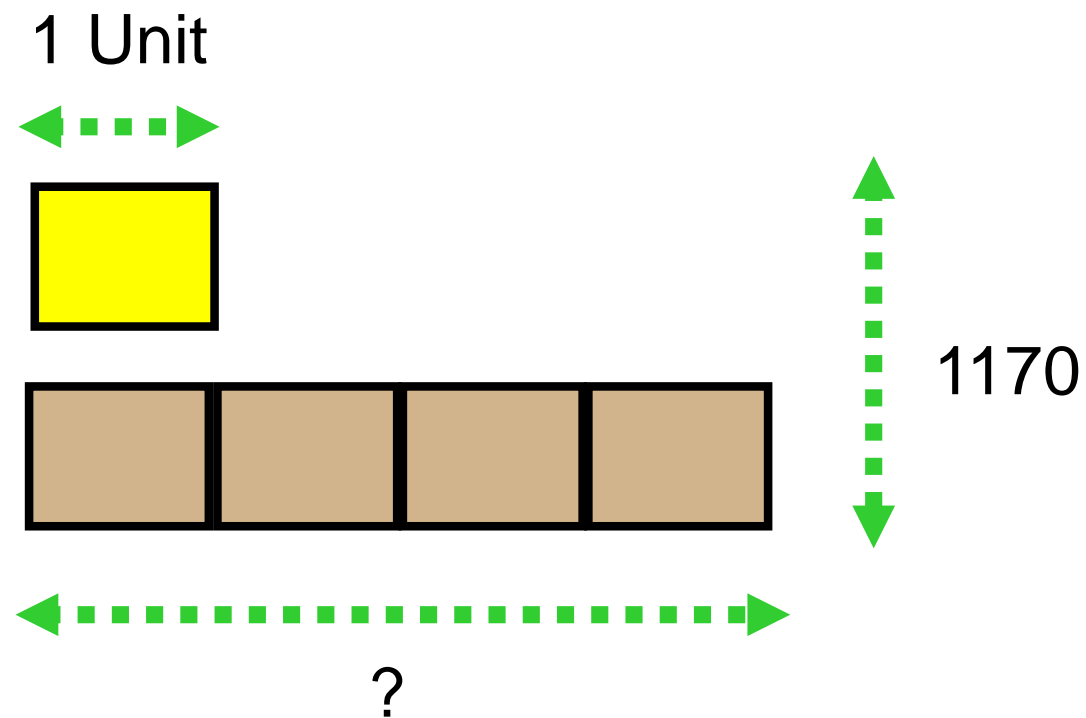
## Bar Models and Problem Solving

48 children went to the zoo,  $\frac{3}{8}$  of them were girls. How many boys were there?



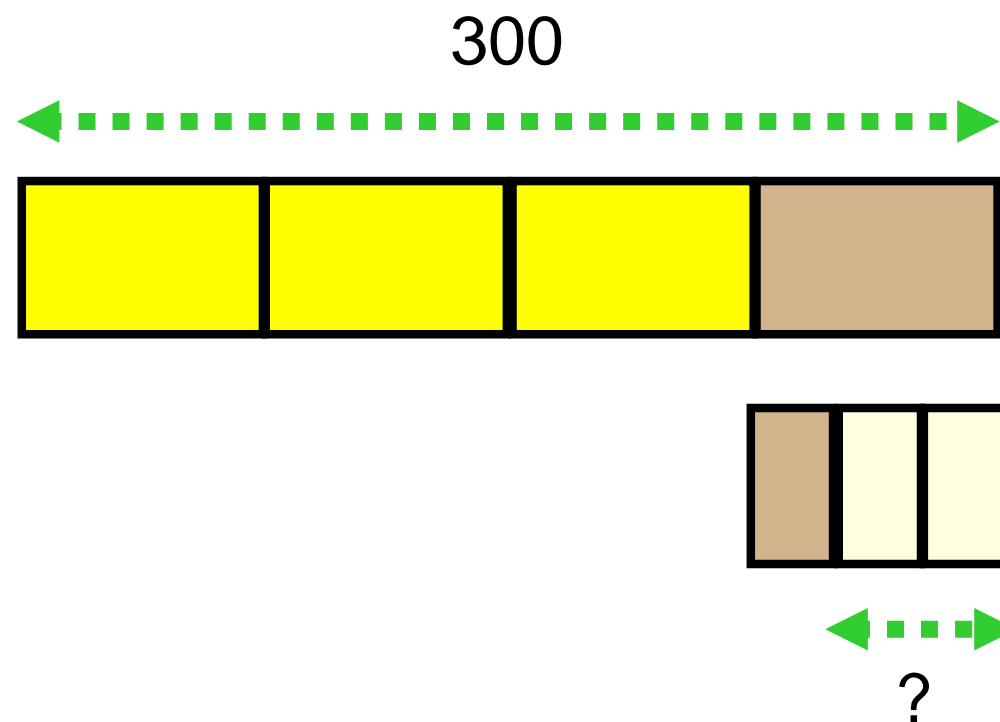
## Bar Models and Problem Solving

Peter collected a total of 1170 stamps. He collected 4 times as many French stamps as other stamps. How many French stamps did he collect?



## Bar Models and Problem Solving

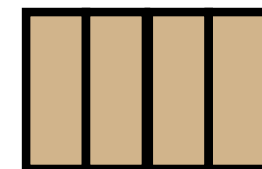
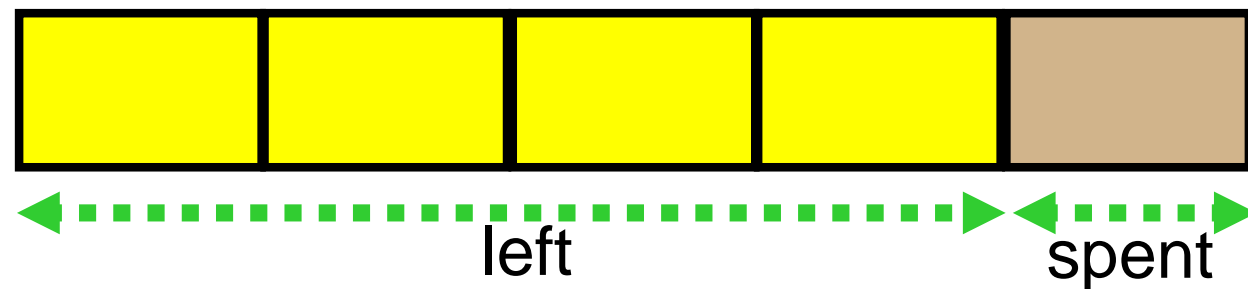
Mrs Lin made 300 biscuits. She sold  $\frac{3}{4}$  of them and gave  $\frac{1}{3}$  of the remainder to her neighbour. How many biscuits had she left?



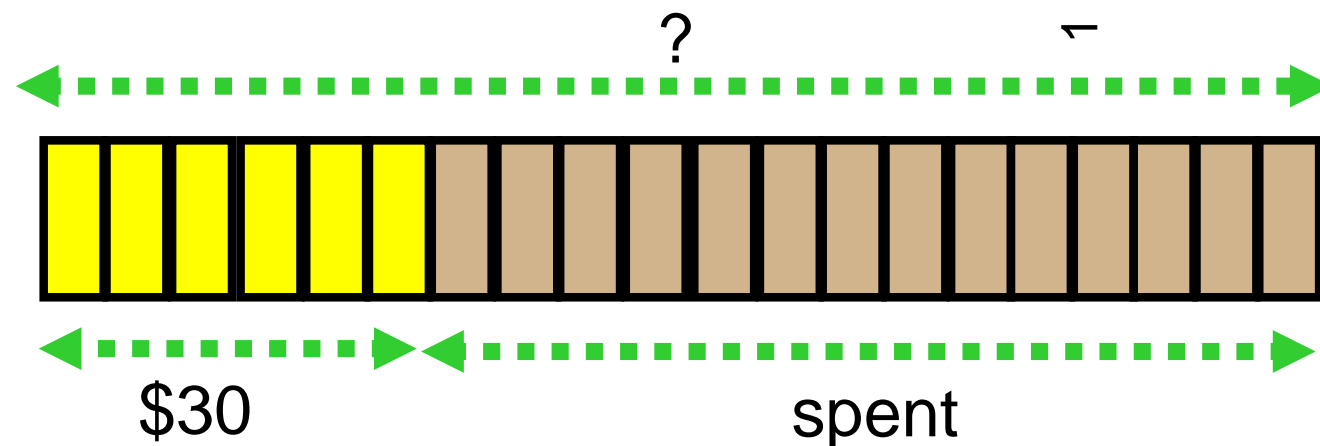
## Bar Models and Problem Solving

Meiling spent an equal amount of money each day? After 4 days she had  $\frac{4}{5}$  of her money left. After another 10 days, she had \$30 left. How much money did she have at first?

*After 4 days*



*After 10 more days (14 days)*



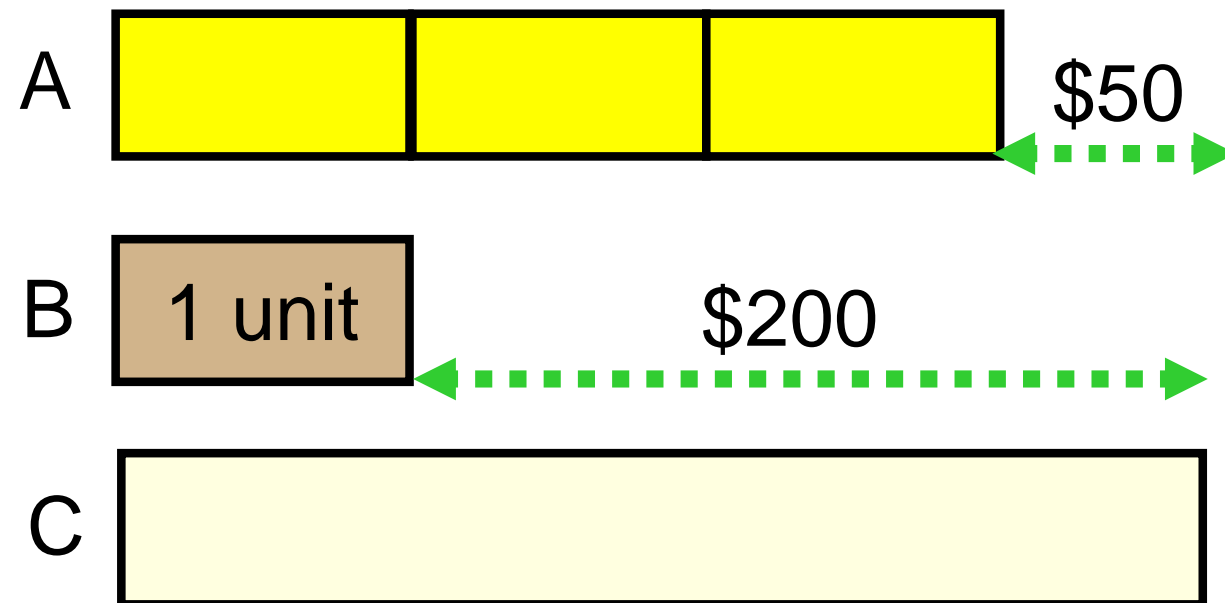
## Bar Models and Problem Solving

A has 3 times as much money as B

B has \$200 less than C

C has \$50 more than A

Find the total amount of money that A, B and C have



## Now it's your turn...

Pedro read 145 pages of a book on Monday.

He read 126 pages of the book on Tuesday.

How many more pages did Pedro read on Monday than on Tuesday?

Diana uses 375 green beads for her art project.  
She uses 96 fewer green beads than blue beads.  
How many blue beads does Diana use for her art project?

There are 2,356 children in the hall.

987 of them are girls.

How many more boys than girls are there in the hall?



Johnny is 16 centimeters shorter than Kevin.  
Kevin is 28 centimeters taller than Leon.  
Leon is 137 centimeters tall. How tall is Johnny?

Matthew bakes some muffins.

He packs them into 75 packets of 6 muffins each and has 5 muffins left.

How many muffins does Matthew bake in all?

Tom has twice as much money as Gabi.

Harry has 3 times as much money as Tom.

Harry has \$138. How much money does Gabi have?

Tom had \$8,153 in his bank account. He deposited another \$847 into the account. He then used all his money to buy 100 identical cameras. He sold the cameras for \$150 each. How much did Tom earn from selling each camera?

Susan has \$80. She spends  $\frac{3}{5}$  of the money on Monday. She spends the remaining money equally over the next 5 days. How much money does she spend on each of the 5 days?

Klein read 30 pages of a book on Monday and  $\frac{1}{8}$  of the book on Tuesday. He completed the remaining  $\frac{1}{4}$  of the book on Wednesday. How many pages are there in the book?

Evan typed 72 pages of notes one day. He typed  $\frac{1}{2}$  of the pages in the morning and  $\frac{1}{3}$  of the pages in the afternoon. He typed the rest of the pages in the evening. How many pages of notes did he type in the morning and afternoon?

Last Saturday, Jay spent 6 hours playing games, studying and talking with his friends. He spent  $\frac{2}{5}$  of the time playing games and  $\frac{1}{2}$  of the time studying. How many minutes did he spend talking with his friends?



Garrett is  $w$  years old. His mother is 4 times his age.

His father is 3 years older than his mother.

How old is Garrett's father in terms of  $w$ ?

If  $w=9$  How old is Garret's father?