





Problem: Thu and Cleo are sharing the driving on a 520 mile trip. If Thu drives 60 miles more than Cleo, how far did each of them drive?








Variable:

m

 = miles driven by Cleo

$230 + 60 =$ miles driven by Thu

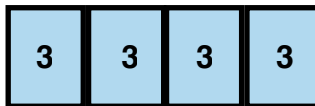
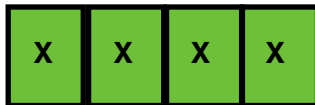
Final Answer: Cleo drove 230 miles, The drove 290

Problem: Linnea is planning on cooking dinner with three of her friends. Linnea's mom agrees to contribute \$12 towards the cost of ingredients, and Linnea and each of her friends agree to split remaining cost equally. If the ingredients cost \$24, how much will Linnea end up spending?



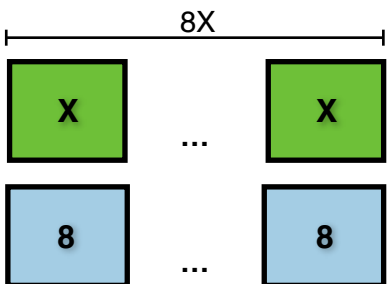
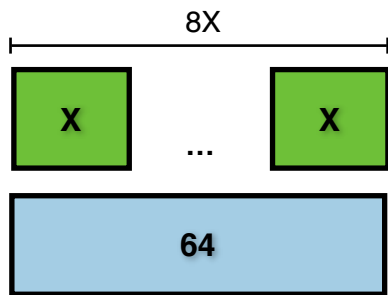
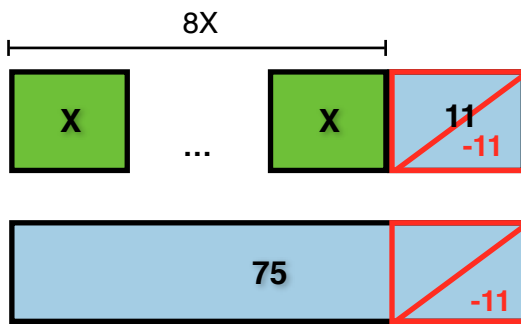
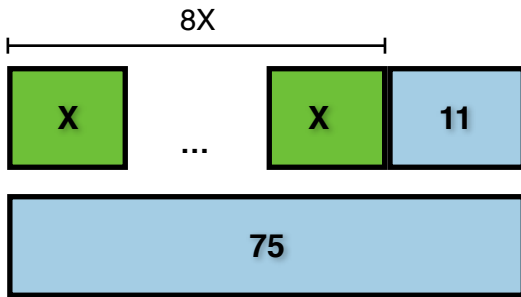
Variable:

X = dollars one friend contributed



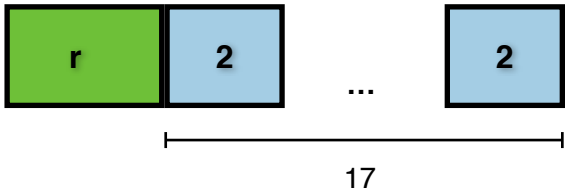
Final Answer: \$3

Problem: $75 = 8x + 11$



Final Answer: $x=8$


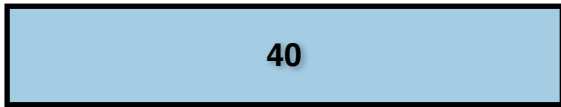
Problem: You ride a taxi for 17 minutes, and you know that they charge a base fee (an amount charged before any minutes have gone by) and \$2 per minute. After the trip, \$40 dollars total is charged. How much was the base fee?

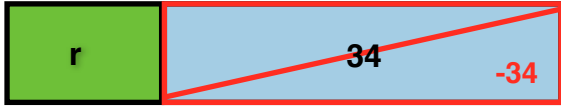



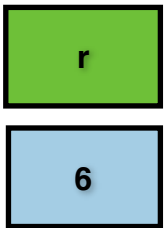
17

Variable:

r = base fee in dollars



Final Answer: \$6

Problem: The sum of two numbers is 12. One number is 4 more than the other. What is the value of the larger number?

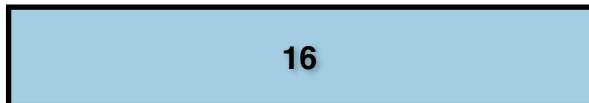


Variables:

L = the larger number

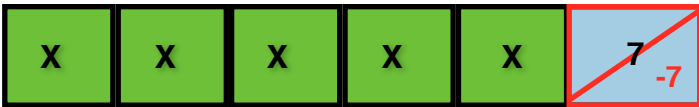
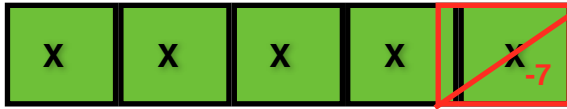


I added 4 to both sides of my equation



Final Answer: The larger number is 8

Problem: $23 = 5x - 7$



I added 7 to both sides
of my equation



Final Answer: $X=6$

Problem: The school is putting in a new row of lockers! You have 100 feet of space, and each locker is 1 ½ feet wide. There needs to be 5 feet of extra space at each end of the row. How many lockers can you put in?

L

5

1.5

...

1.5

5

100

Variables:

L

 = Number of lockers

L

1.5

...

1.5

5

5

100

-10

L

1.5

...

1.5

90

Final Answer: 60 lockers

Problem: You are at school assembly and getting bored. You know the next class is supposed to start in 40 minutes, and the teachers usually allow 10 minutes after assembly for you to get back to class. You estimate each speaker is about 6 minutes. If there are only speakers remaining in assembly, how many more speakers are there?

s

Variables:

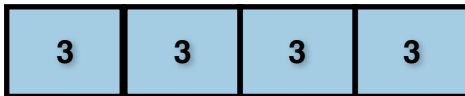
s = number of speakers

s

s

Final Answer: 5 speakers

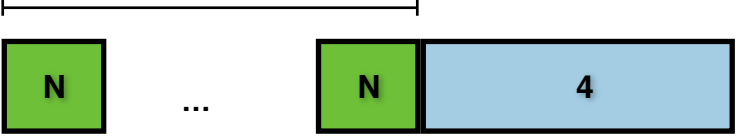
Problem: $4x + 7 = 19$




Final Answer: $X=3$

Problem: I am some number. Multiply me by 6, and add 4 and you get 10.
What number am I?

$6N$



...




Variables:


N

 = The number


$6N$




...



$6N$





...



Final Answer: The number is 1


Problem: Last week Javier had twice as many stickers as Daniel. Then Daniel received 12 stickers for his birthday. Together they now have 90 stickers. How many stickers did Daniel have last week?

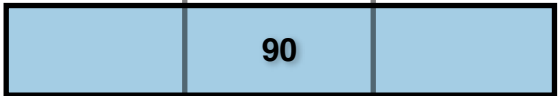




Variables:

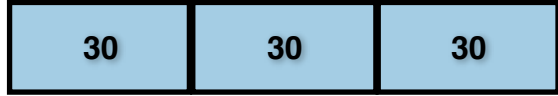
d

 = The number of stickers Daniel had last week



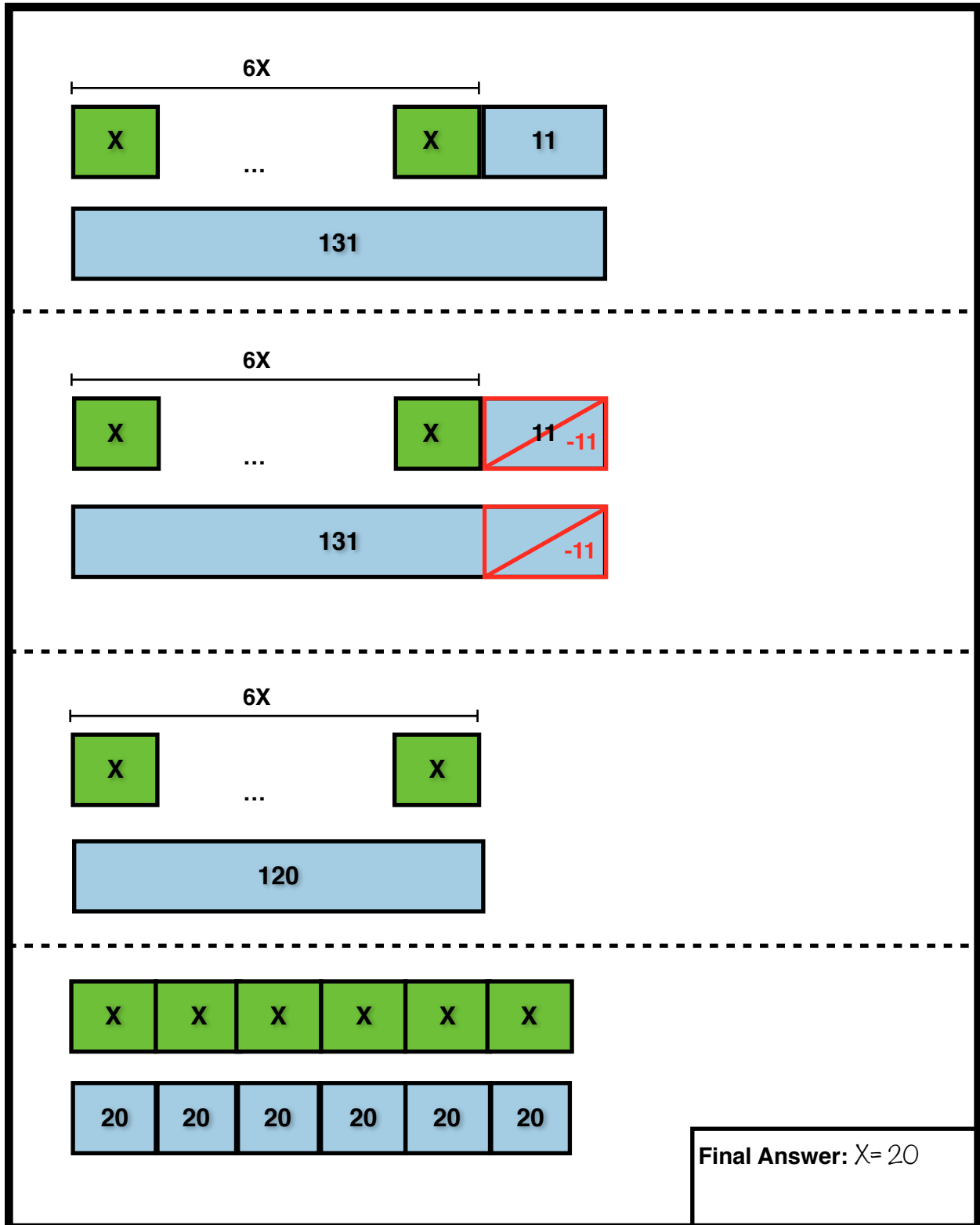






Final Answer: 30 stickers

Problem: $131 = 6x + 11$



Problem: Sunny Hill Farms and Babbling Brooks Farms both raise hens. Sunny Hill Farms has 35 hens. Babbling Brooks Farms has 15 hens. If together the farms have 500 eggs at the end of the week, and each hen laid the same number of eggs, how many eggs did each hen lay last week?

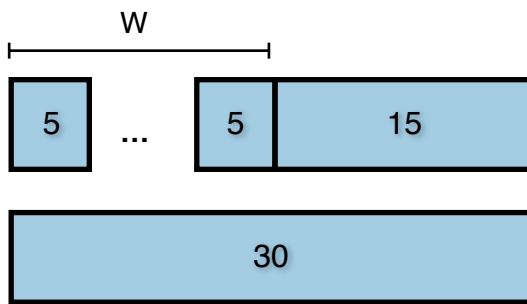
The diagram is enclosed in a large black rectangular border. It is divided into two horizontal sections by a dashed line. The top section shows a diagram with a horizontal line above it labeled $35 + 15$. Below the line are two green boxes, each containing the letter 'E', with an ellipsis between them. Below this is a blue rectangular box containing the number '500'. The bottom section shows a similar diagram, but the horizontal line above it is labeled '50'. Below it are two green boxes, each containing the letter 'E', with an ellipsis between them. Below this is a blue rectangular box containing the number '500'. To the right of the top section, there is a box containing the text 'Variables:' followed by a green box with 'E' inside, and the text '= The number of eggs one hen lays in a week'. In the bottom right corner of the large border, there is a box containing the text 'Final Answer: One hen lays 10 eggs in a week'.

Variables:

E = The number of eggs one hen lays in a week

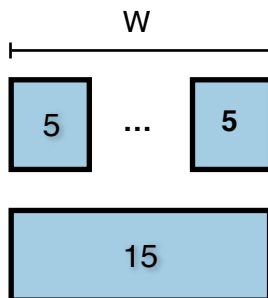
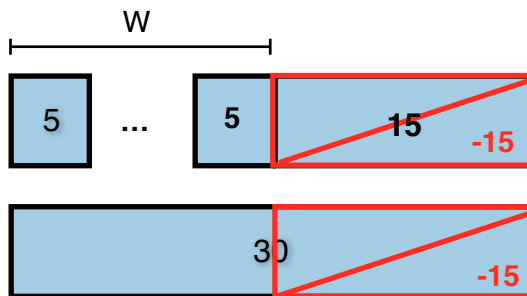
Final Answer: One hen lays 10 eggs in a week

Problem: Felix wants to buy a new pair of shoes that cost \$30. He has \$15 now, and knows he can earn \$5 a week helping his grandma with yard work. How many weeks will it take Felix to be able to afford the shoes?



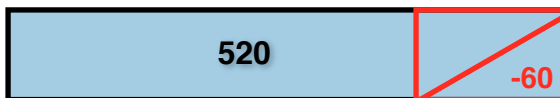
Variables:

W = weeks until Felix can afford the shoes



Final Answer: 3 weeks

Problem: $520 = x + (x + 60)$



Final Answer: $X=230$

Problem: Jason had 111 dollars to spend. After buying 5 books he had 11 dollars left. Each book costs the same amount. How much did each book cost?

$5b$

b ... b 11

111

Variables:

b = the price of one book

$5b$

b ... b ~~11~~

~~-11~~

111 ~~-11~~

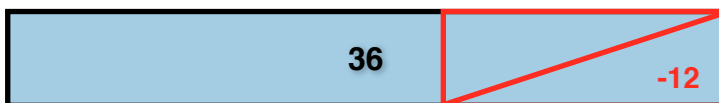
$5b$

b ... b

100

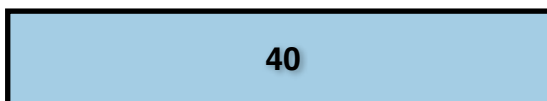
Final Answer: \$20

Problem: $36 = 12 + 4x$



Final Answer: $x=6$

Problem: $50 = 10 + 4x$



Final Answer: $X = 10$

Problem: $12x + 3 = 43$

12

x 3 ... 3

43

x 36

43

x 36 -36

43 -36

x

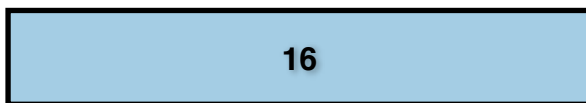
7

Final Answer: $X = 7$

Problem: $12 = x + (x-4)$

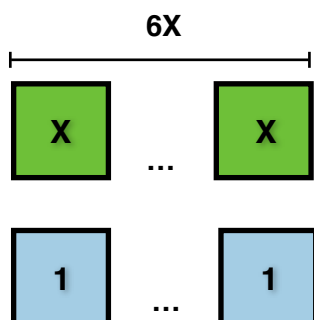
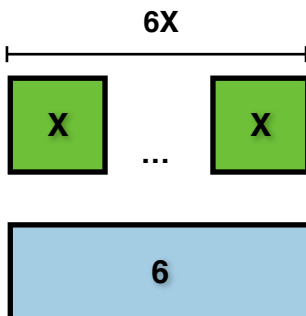
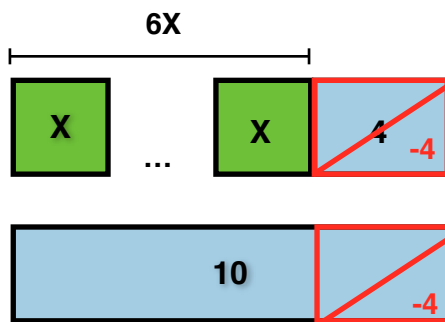
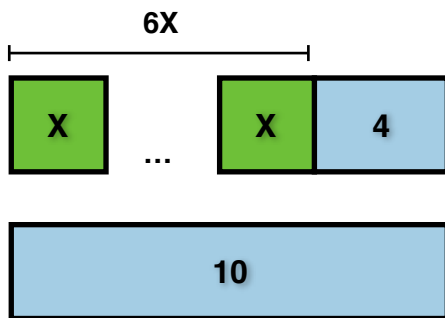


I added 4 to both sides
of the equation



Final Answer: $x = 8$

Problem: $6x + 4 = 10$



Final Answer: $x = 1$