

Shopping Spree

Your Challenge

You visit the general store with some money to spend. The cost of items at the store is shown in the table below.

Item	Price
Ball	\$5
Pack of Gum	\$2
Hat	\$10
Sticker	\$1

1. You have \$50 to spend at the store. If you spend all your money on one kind of item, how many of each item can you buy? Write an equation for each kind of item on the **Recording Sheet** to show how you get each answer.
2. You decide to buy at least one of each item. You spend all your money. How many of each item could you buy? Write equations on the **Recording Sheet** to show your work.

Are there other possible solutions?



Shopping Spree

1. 10 balls; $10 \times \$5 = \50

25 packs of gum; $25 \times \$2 = \50

5 hats; $5 \times \$10 = \50

50 stickers; $50 \times \$1 = \50

2. Answers will vary. Possible student work shown.

4 balls: $4 \times \$5 = \20

5 packs of gum: $5 \times \$2 = \10

1 hat: $1 \times \$10 = \10

10 stickers: $10 \times \$1 = \10

$\$20 + \$10 + \$10 + \$10 = \$50$



Arranging Desks

Your Challenge

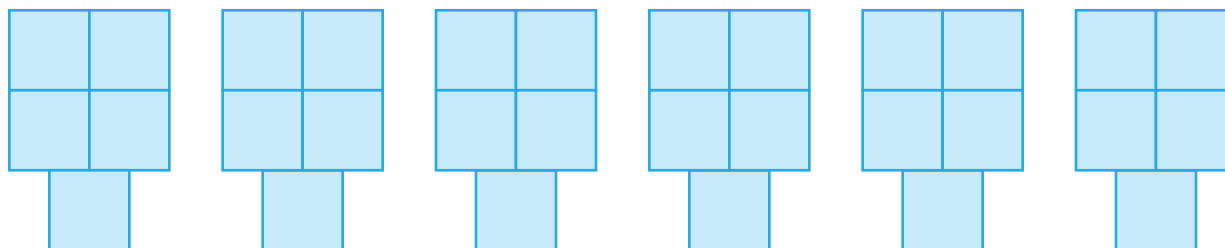
1. Your teacher puts you in charge of setting up 30 desks in the classroom. The desks must be arranged in at least two equal groups or rows. How could you set up the classroom? Draw a picture and write a multiplication and a division equation to show your solution on the **Recording Sheet**.
2. What are other ways you could set up the classroom? The desks must still be in equal groups or rows. Draw a picture and write a multiplication and a division equation to show each of your solutions on the **Recording Sheet**.

Is your answer reasonable?



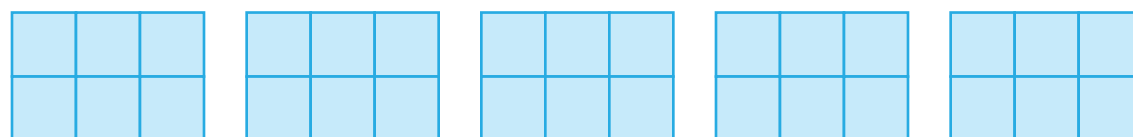
Arranging Desks

1. Answers will vary. Possible answer shown. Possible arrangements are equal groups or arrays showing 2×15 , 3×10 , 5×6 , 6×5 , 10×3 , or 15×2 .

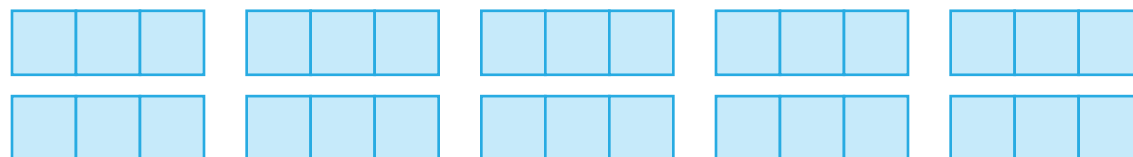


$$6 \times 5 = 30 \quad 30 \div 6 = 5$$

2. Answers will vary. Possible answer shown. Possible arrangements are equal groups or arrays showing 2×15 , 3×10 , 5×6 , 6×5 , 10×3 , or 15×2 .



$$5 \times 6 = 30 \quad 30 \div 5 = 6$$



$$10 \times 3 = 30 \quad 30 \div 10 = 3$$

Display of Cans**Your Challenge**

1. You see a shopping cart bump into a display of cans stacked in an array. Many of the cans fall onto the floor. You count 60 cans. You can tell by the cans that are still in place that they were stacked in at least 4 rows with at least 10 cans in each row. Draw a picture and write an equation on the **Recording Sheet** to show how the cans could have been arranged in the display.
2. You are asked to make a similar display for more than 60 cans but fewer than 80 cans using the following rules:

The cans are arranged in an array.

There must be at least 5 rows of cans.

There must be at least 6 cans per row.

How many different arrays can you make? Show your displays on the **Recording Sheet**.



Display of Cans

1. Pictures will vary should show 4 rows of 15 cans, 5 rows of 12 cans, or 6 rows of 10 cans. Some possible arrays and equations shown.

$$4 \times 15 = 60 \quad 60 \div 4 = 15$$

$$5 \times 12 = 60 \quad 60 \div 5 = 12$$

2. There are 18 possible arrays. Pictures will vary. Some possible arrays are 6 rows of 11 cans, 7 rows of 9 cans, 8 rows of 8 cans, 9 rows of 8 cans, and 10 rows of 7 cans.