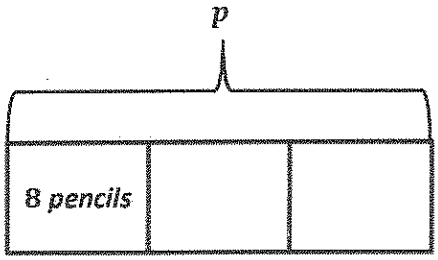
G3-M3-Lesson 11

1. There are 8 pencils in one box. Corey buys 3 boxes. He gives an equal number of pencils to 4 friends. How many pencils does each friend receive?

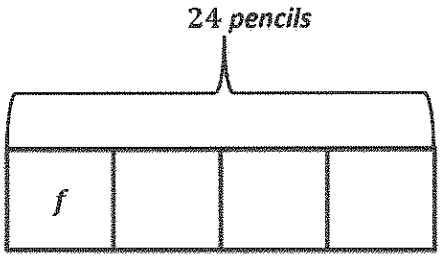


I can draw a tape diagram to help me solve. I know the number of groups is 3, and the size of each group is 8. I need to solve for the total number of pencils. I can use the letter p to represent the unknown.

$3 \times 8 = p$

$p = 24$

I can multiply 3×8 to find the total number of pencils Corey buys. Now I need to figure out how many pencils each friend gets.



I can draw a tape diagram with 4 units to represent the 4 friends. I know that the total is 24 pencils. I need to solve for the size of each group. I can use the letter f to represent the unknown.

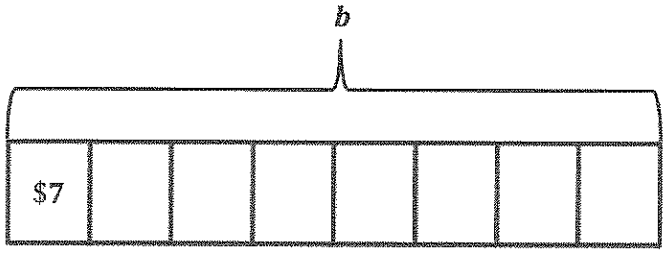
$24 \div 4 = f$

$f = 6$

I can divide 24 by 4 to find the number of pencils each friend gets.

Each friend receives 6 pencils.

2. Lilly makes \$7 each hour she babysits. She babysits for 8 hours. Lilly uses her babysitting money to buy a toy. After buying the toy, she has \$39 left. How much money did Lilly spend on the toy?

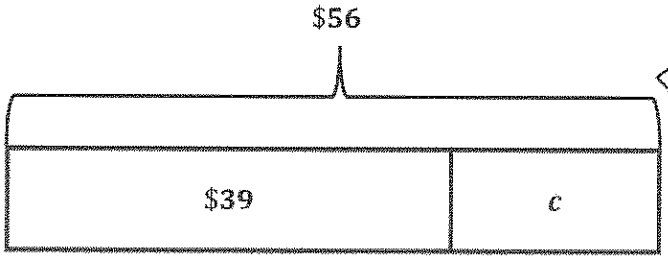


I can draw a tape diagram to help me solve. I know the number of groups is 8, and the size of each group is \$7. I need to solve for the total amount of money. I can use the letter b to represent the unknown.

$8 \times \$7 = b$

$b = \$56$

I can multiply $8 \times \$7$ to find the total amount of money Lilly earns babysitting. Now I need to figure out how much money she spent on the toy.



I can draw a tape diagram with two parts and a total of \$56. One part represents the amount of money Lilly has left, \$39. The other part is the unknown and represents the amount of money Lilly spent on the toy. I can use the letter c to represent the unknown.

$\$56 - \$39 = c$

I can subtract $\$56 - \$39$ to find the amount of money Lilly spent on the toy.

$\$57 - \$40 = \$17$

$c = \$17$

I can use compensation to subtract using mental math. I do that by adding 1 to each number, which makes it easier for me to solve.

$$\begin{array}{r} {}^{4}\cancel{5}\,{}^{16}\cancel{6} \\ -\,\$\ 3\ 9 \\ \hline \$\ 1\ 7 \end{array}$$

Or I can use the standard algorithm for subtraction.

Lilly spent \$17 on the toy.