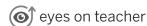
Uncovering the Unknown

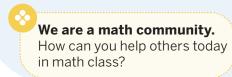
Let's represent and solve multi-step story problems with an unknown quantity.



Warm-Up







Activity

1

Read, Write, Represent, Solve!

Han has a collection of 114 stickers. He bought some new stickers at the store.

- Han bought 5 packs of insect stickers with 15 stickers in each pack.
- Han bought 7 packs of animal stickers with 25 stickers in each pack.
- Han gave 46 stickers to a friend and kept the rest.

Andrea and Gil wrote an equation to represent the number of stickers Han has.

Andrea Gil
$$s = (5 \times 15) + (7 \times 25) + (114 - 46)$$
 $s = 114 + [5(15) + 7(25) - 46]$

1 Whose equation will you choose to solve? Justify your thinking.

1

Read, Write, Represent, Solve! (continued)

2 Circle the equation you will use to solve for s, the number of stickers Han has altogether. Then solve for s.



Show your thinking.

$$s = 114 + (5 \times 15) + (7 \times 25) - 46$$
 $s = 114 + [5(15) + 7(25) - 46]$

$$s = 114 + [5(15) + 7(25) - 46]$$

answer: _____

- 3 A grocery store received 14 boxes of milk.
 - Each box contained 16 bottles of milk.
 - The grocery store already had 22 bottles of milk in the fridge.
 - There were 9 bottles of milk that were removed from the fridge.

Write an equation that represents m, the number of bottles of milk the grocery store has altogether. Then solve the story problem.



Show your thinking.

equation: _

_____ answer: _

2

Story Solutions

- 4 A librarian is organizing books.
 - There are 3 boxes with 65 books in each box.
 - The librarian gives 35 books away.
 - There are 160 loose books in a bin.
 - All of the remaining books will be split evenly between 8 shelves.

How many books will be on each shelf?



Show your thinking.

answer: _____

- 5 Shawn, Jada, and Diego have \$75 to buy snacks. They bought pretzels for \$13, popcorn for \$12, and sports drinks for \$17. They decided to split the leftover money equally. How much money will they each keep?
 - Show your thinking.

answer: _____

2

Story Solutions (continued)

The table shows the number of T-shirts made at a factory in May. The number of T-shirts in Week 4 is represented by t.

Week	Number of T-shirts
1	213,755
2	505,681
3	362,049
4	t

The total number of T-shirts made in May was 1,342,070. Solve for *t*.

i Show your thinking.

answer: _____