Name _____ Date _____

🔺 TEKS 5.1.A, 5.1.B, 5.1.E, 5.4.B, 5.4.F

Uncovering the Unknown

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

Warm-Up   👁️↑ eyes on teacher

We are a math community.
How can you help others today in math class?

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.

_____

_____

_____

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.**

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

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:** _____

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?

i 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?

i Show your thinking.

answer: _____

6 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.

Show your thinking.

answer: _____