# 3.4(A)

solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction



## Fluency Lesson (if necessary)

• Subtraction Regrouping

13582

Hundreds	Tens	Ones

## Fluency Practice

• Subtracting across Zeros

100 82

Hundreds	Tens	Ones

### Fluency Lesson (if necessary)

• "Carrying Over" when adding

135 + 82

Hundreds	Tens	Ones

## Problem Solving Strategies

#### **Step 1: Show what you know**

• If there's a vocabulary word you know, write or draw something to show you know it.

#### **Step 2: Solve and Check**

• Add to check your subtraction, etc

#### **Step 3: Eliminate and Justify**

- Don't just cross answers out and pick your favorite choice.
- SHOW why a choice is wrong.

### Problem Solving Lesson

if you find an issue with fluency, go straight to the fluency sections of lesson

- Ask 2 questions to know which operation to choose:
  - Am I looking for a bigger number?
  - Are there groups?

	Getting Bigger (in all, total, combined)	Getting Smaller (how many more, difference)
Groups (each, an, every, per)	Multiply (x)	Divide ( / )
No Groups	Add (+)	Subtract ( - )

2 min

## Problem Solving Lesson

#### When to add in word problems

- No Groups AND The number we're looking for is bigger.
- In all, total, combined, sum

#### When to subtract in word problems

- No Groups AND The number we're looking for is smaller
- The difference, how much more, compare, what's left?

## Examples

John rode his bike 3,452 feet on Monday and 5,439 feet on Tuesday. How many feet did John ride his bike on **Monday and Tuesday?** 

- No Grouping involved
- We're looking for a bigger number
- ADD

John rode his bike 3,452 feet on Monday and 5,439 feet on Tuesday. **How many more** feet did John ride his bike **on Tuesday than Monday**?

- No Grouping involved
- We're looking for a smaller number
- SUBTRACT

## Using Strip Diagrams

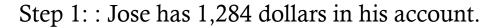
Example: Jose has 1,284 dollars in his account. Mary has 365 dollars less than Jose. How much money do Jose and Mary have in all?

Step 1: Jose has 1,284 dollars in his account

Jose

1,284 dollars

Example: Jose has 1,284 dollars in his account. Mary has 365 dollars less than Jose. How much money do Jose and Mary have in all?



Jose 1,284 dollars

#### Step 2: Mary has 365 dollars less than Jose.

Jose 1,284 dollars

Mary 919 dollars -365

Example: Jose has 1,284 dollars in his account. Mary has 365 dollars less than Jose. How much money do Jose and Mary have in all?

Step 2: Mary has 365 dollars less than Jose.



#### Step 3: How much money do Jose and Mary have in all?



### I Do

Erika's goal is to practice playing her guitar for 300 minutes this week.

- On Sunday she practiced for 117 minutes.
- On Tuesday she practiced for 58 minutes.

How many more minutes does Erika need to practice in order to meet her goal?

- A 125 minutes
- B 235 minutes
- C 475 minutes
- D 175 minutes

#### We Do – Student 1

The table shows the numbers of puzzle pieces in four puzzles. Derek put together the two puzzles that had the greatest numbers of pieces.

#### Puzzle Pieces

Puzzle	Number of Pieces
Lion	402
Boat	498
Garden	419
Waterfall	473

What is the total number of pieces in these two puzzles?

A 961

**B** 900

C 861

D Not here

### We do - Student 2

Wanda traveled on an airplane three times last year.

- In January she traveled 278 miles.
- In April she traveled 652 miles.
- In September she traveled 767 miles.

How many more miles did Wanda travel in January and April combined than she traveled in September?

F 930 mi

G 147 mi

H 163 mi

J 237 mi

### We do - Student 3

Adyssen started with \$87 in her bank account. She put \$213 into her account last week and another \$137 this week. What is the total amount Adyssen now has in her bank account?

### We do – Student 4

Mr. Thompson sold 247 meals on Tuesday at his restaurant. He sold 516 meals on Wednesday. What is the difference between the numbers of meals Mr. Thompson sold on these two days?

F 763

G 331

H 379

J 269

Ms. Elizondo shipped yogurt cups to stores on Monday.

- She shipped 648 cups of strawberry yogurt.
- She shipped 216 cups of peach yogurt.
- She shipped 264 cups of vanilla yogurt.

How many more cups of strawberry yogurt did Ms. Elizondo ship than cups of peach and vanilla yogurt combined?

A 168

**B** 480

C 248

D 178

### Debrief

- Strip Diagrams help you visualize (see) word problems better. They are organized in boxes or groups and can add onto each other
- Equations have equal signs and help you take a word problem that is written in any language and turn it into math language
- In order to be successful in word problems, you need to know what words in English translate to in MATH:
  - Subtract: You're comparing two numbers. How many more
     \_\_\_\_ than \_\_\_\_
  - sum is the answer you get when you add

### You Do

Click Here to Take Your Quiz!