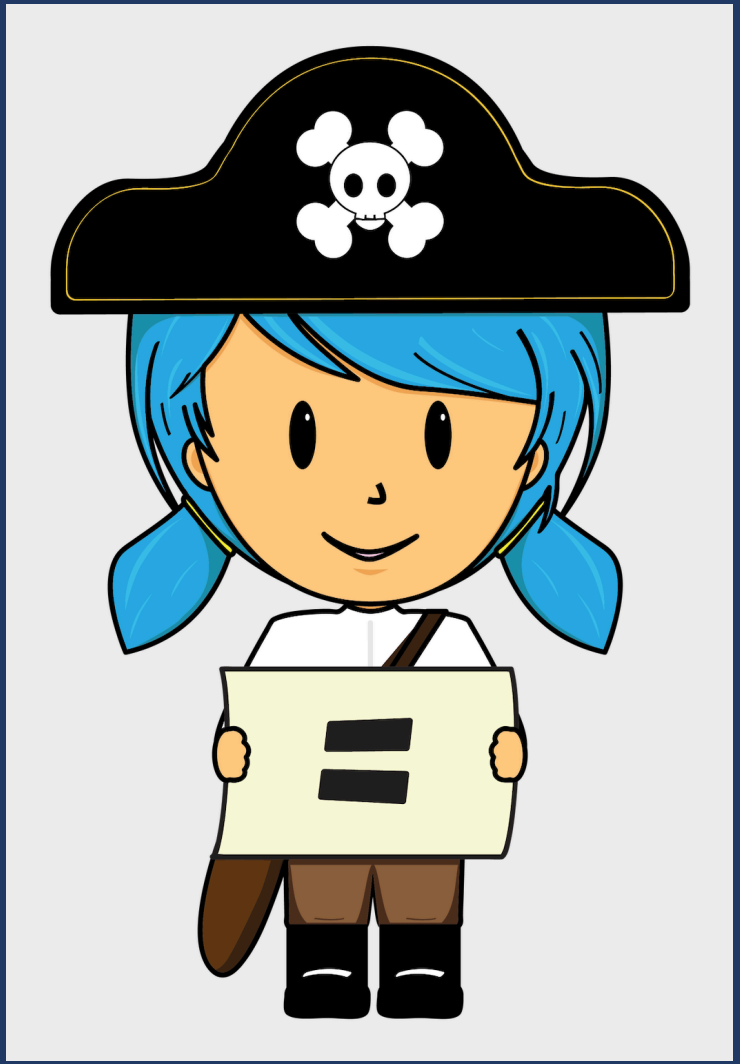
Word Problems?
Not a Problem!



srpowell@austin.utexas.edu

kberry@austin.utexas.edu

@sarahpowellphd

Mr. Conley delivers packages. The bar graph shows the total number of packages he delivered on five days last week.

6. Part A

What is the total number of packages Mr. Conley delivered on Monday and Tuesday?

Ⓐ 300

Ⓑ 340

Ⓒ 350

Ⓓ 360

Reading problems

Understanding vocabulary

Identifying relevant information

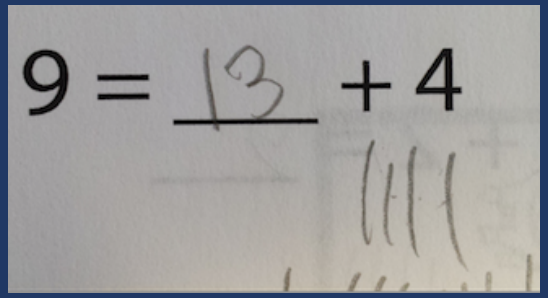
Ignoring irrelevant information

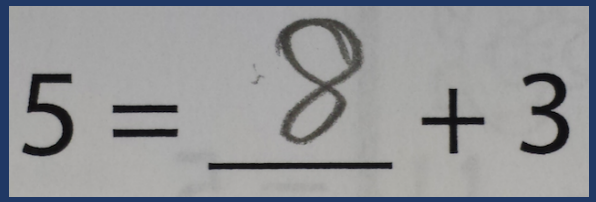
Interpreting charts and graphs

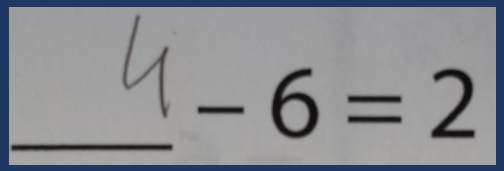
Identifying appropriate operation(s)

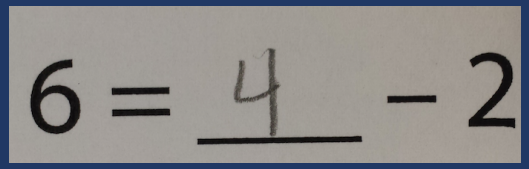
Performing the computation(s)

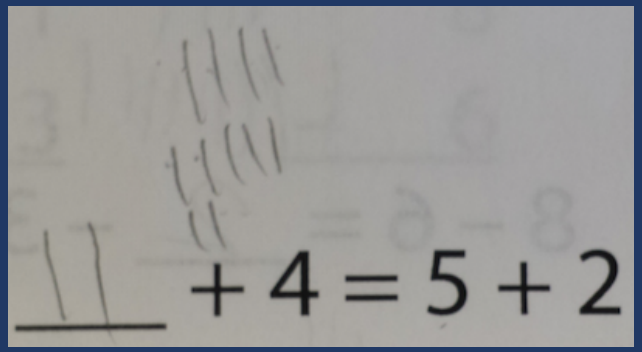
PARCC third-grade release item (2015)

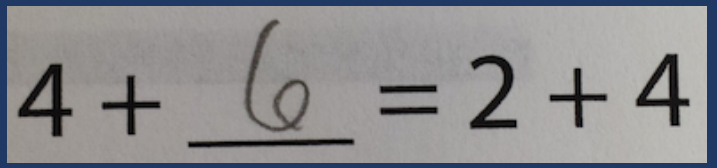


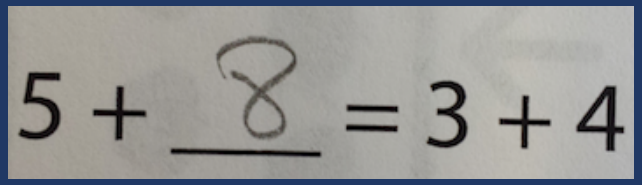


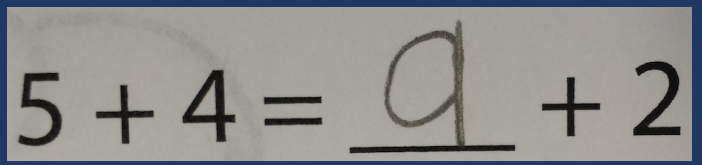


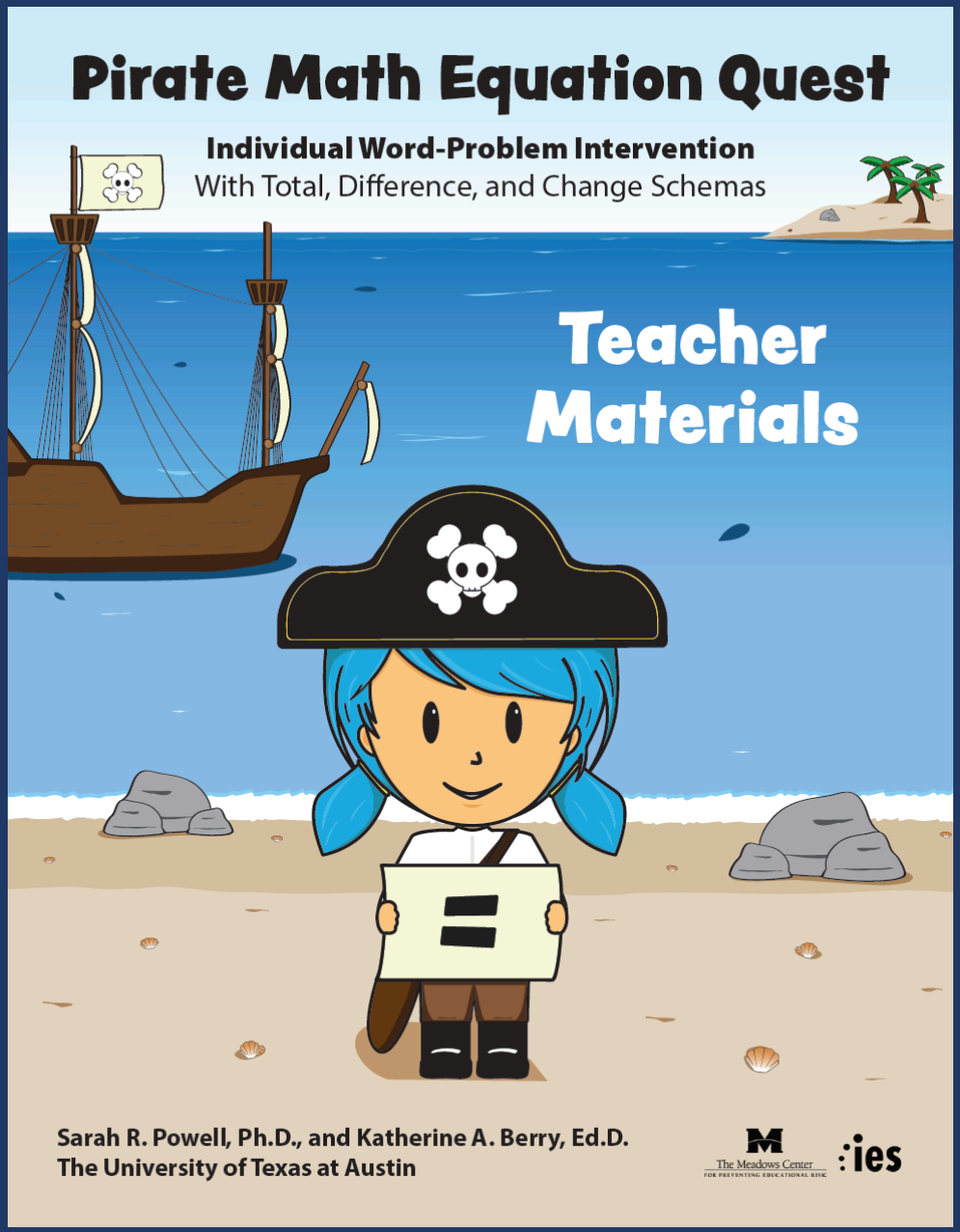












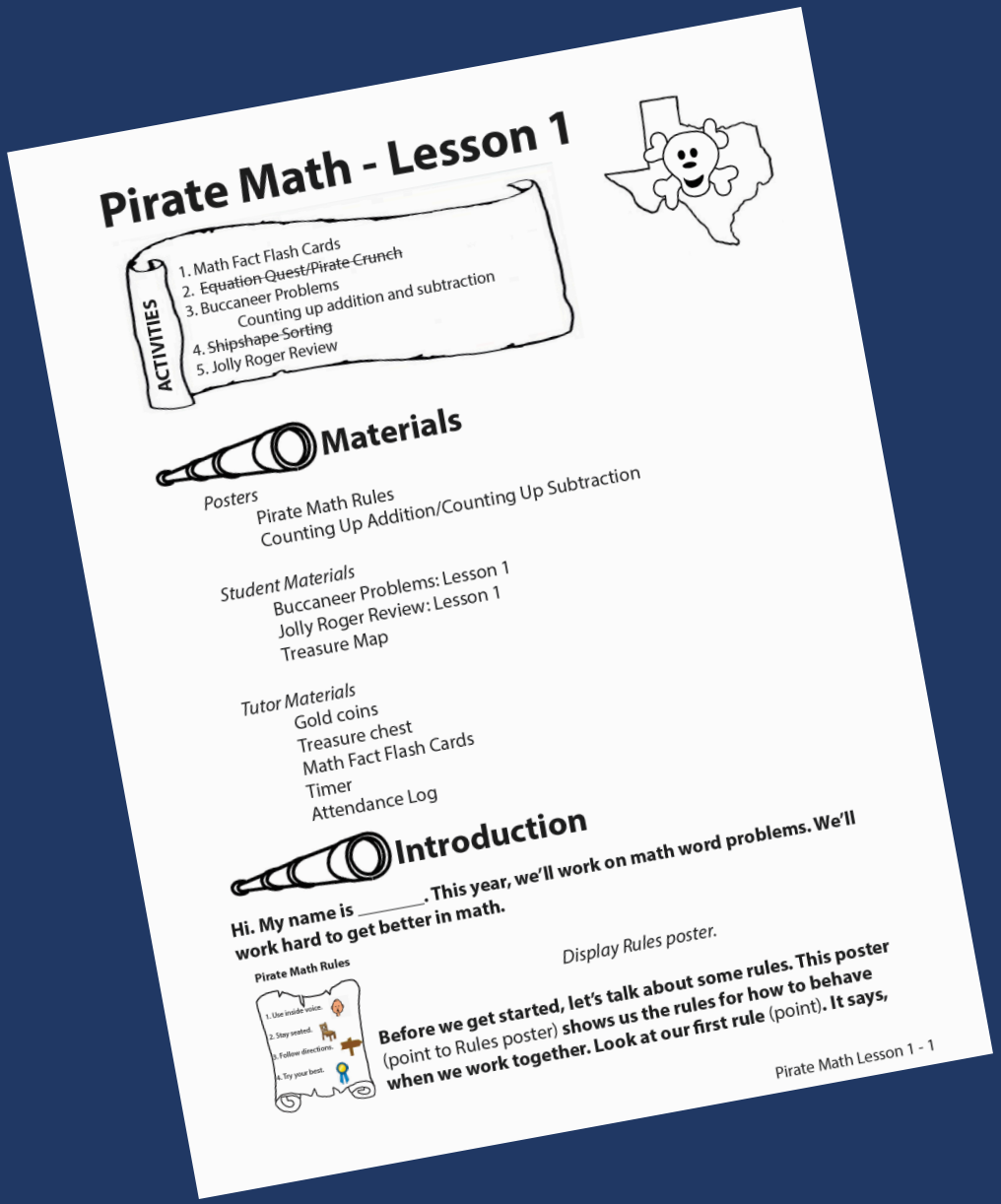
Intervention

17 weeks

3 times a week

25-30 min/session

Individual instruction provided by tutors



Pirate Math - Lesson 1

ACTIVITIES
1. Math Fact Flash Cards
2. ~~Equation Quest/Pirate Crunch~~
3. Buccaneer Problems
   Counting up addition and subtraction
4. ~~Shipshape Sorting~~
5. Jolly Roger Review

Materials

Posters
Pirate Math Rules
Counting Up Addition/Counting Up Subtraction

Student Materials
Buccaneer Problems: Lesson 1
Jolly Roger Review: Lesson 1
Treasure Map

Tutor Materials
Gold coins
Treasure chest
Math Fact Flash Cards
Timer
Attendance Log

Introduction

Hi. My name is _____. This year, we'll work on math word problems. We'll work hard to get better in math.

Display Rules poster.

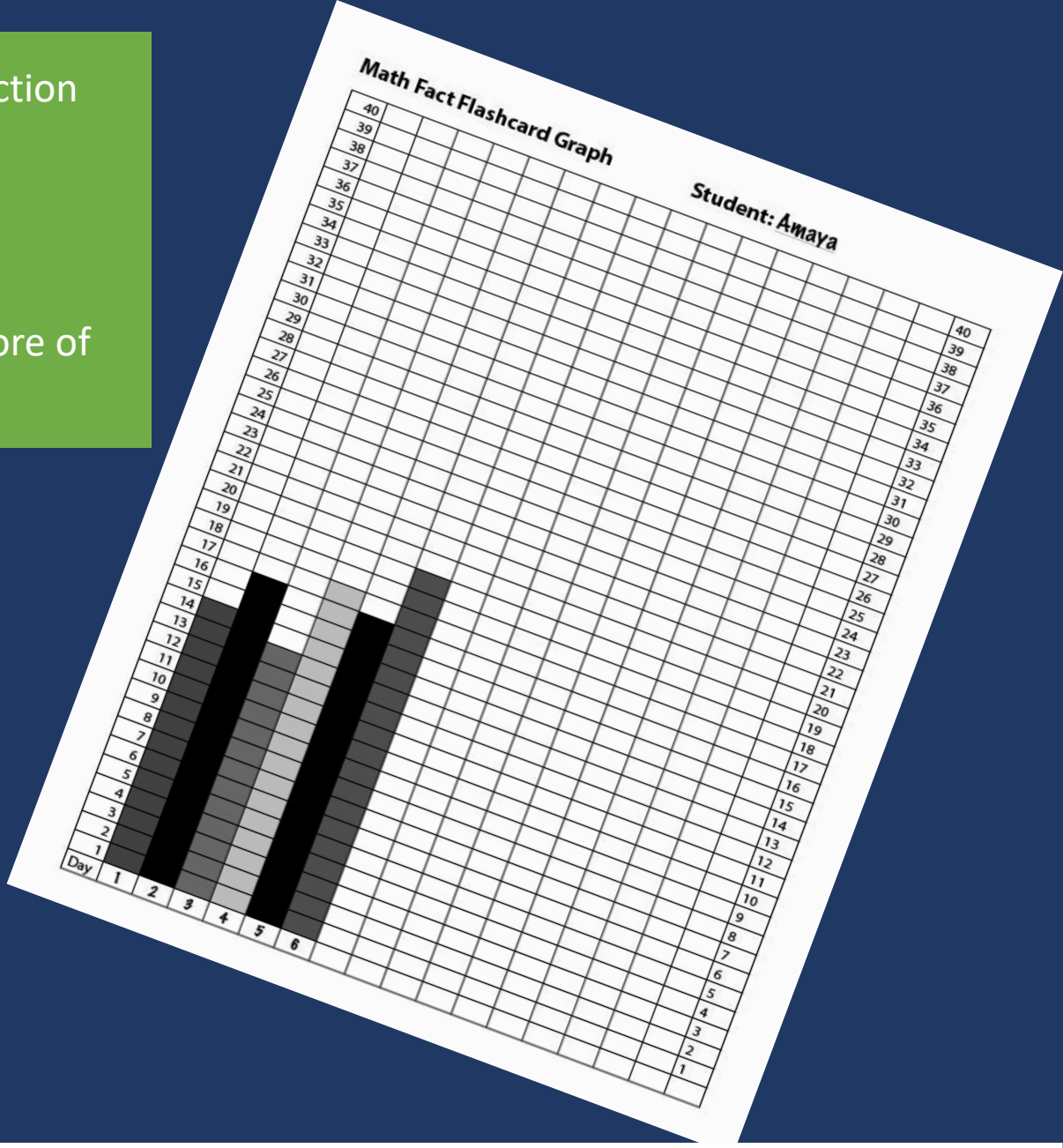
Pirate Math Rules
1. Use inside voice.
2. Stay seated.
3. Follow directions.
4. Try your best.

Before we get started, let's talk about some rules. This poster (point to Rules poster) **shows us the rules for how to behave when we work together. Look at our first rule** (point)**. It says,**

Pirate Math Lesson 1 - 1

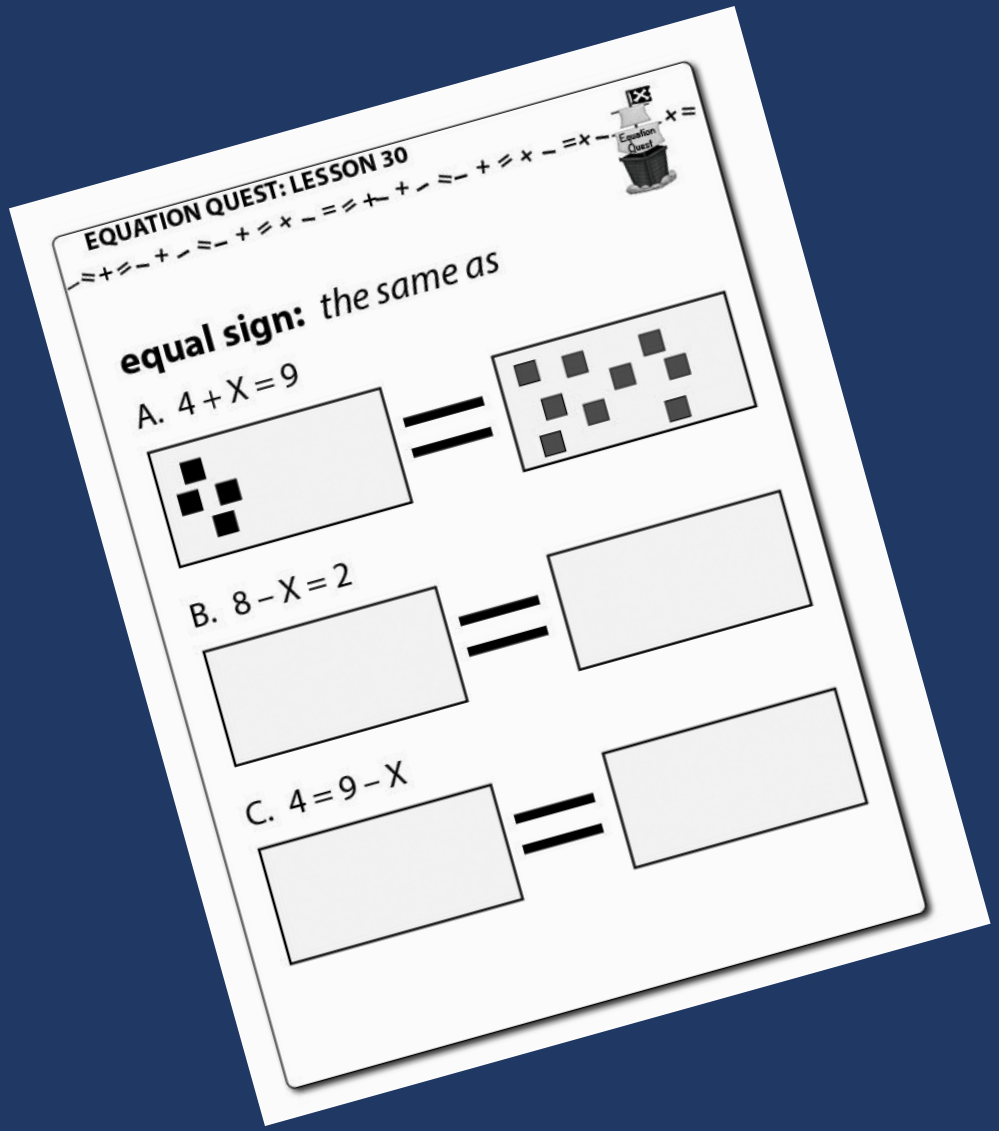
Math Fact Flashcards

- 1 min addition and subtraction flashcards
- Student counts score
- Another 1 min
- Student counts score
- Student graphs highest score of day



Equation Quest

- 2 min about the equal sign and solving equations
  - Equal sign defined as “same as”
  - Practice with manipulatives and pictures
  - Practice isolating a variable



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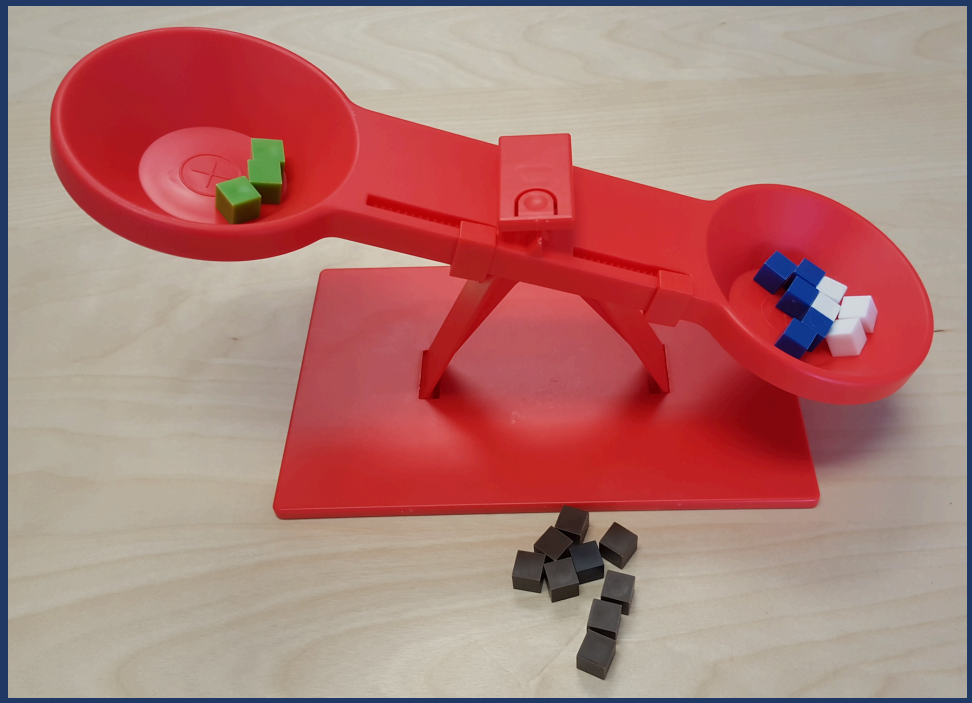
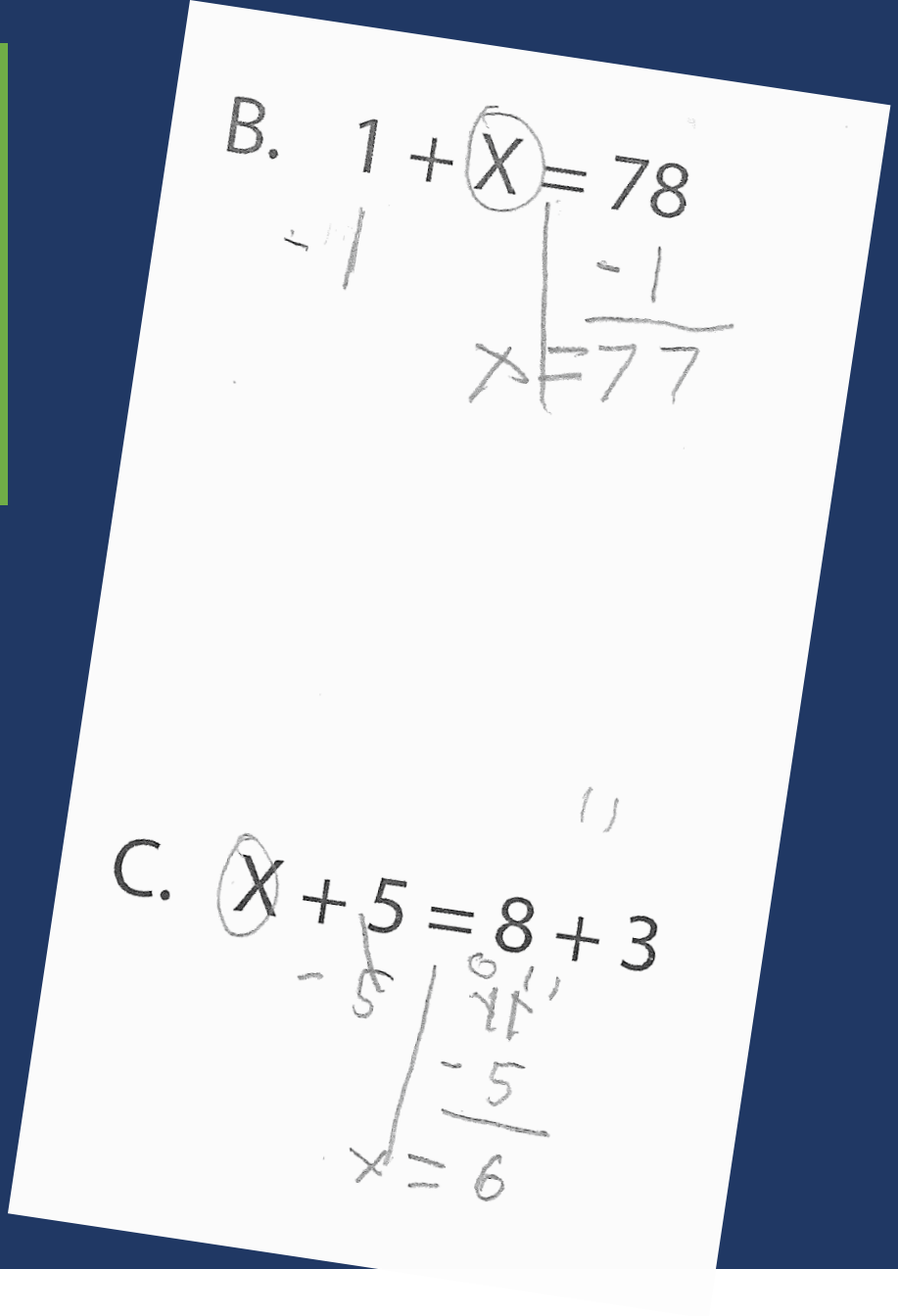
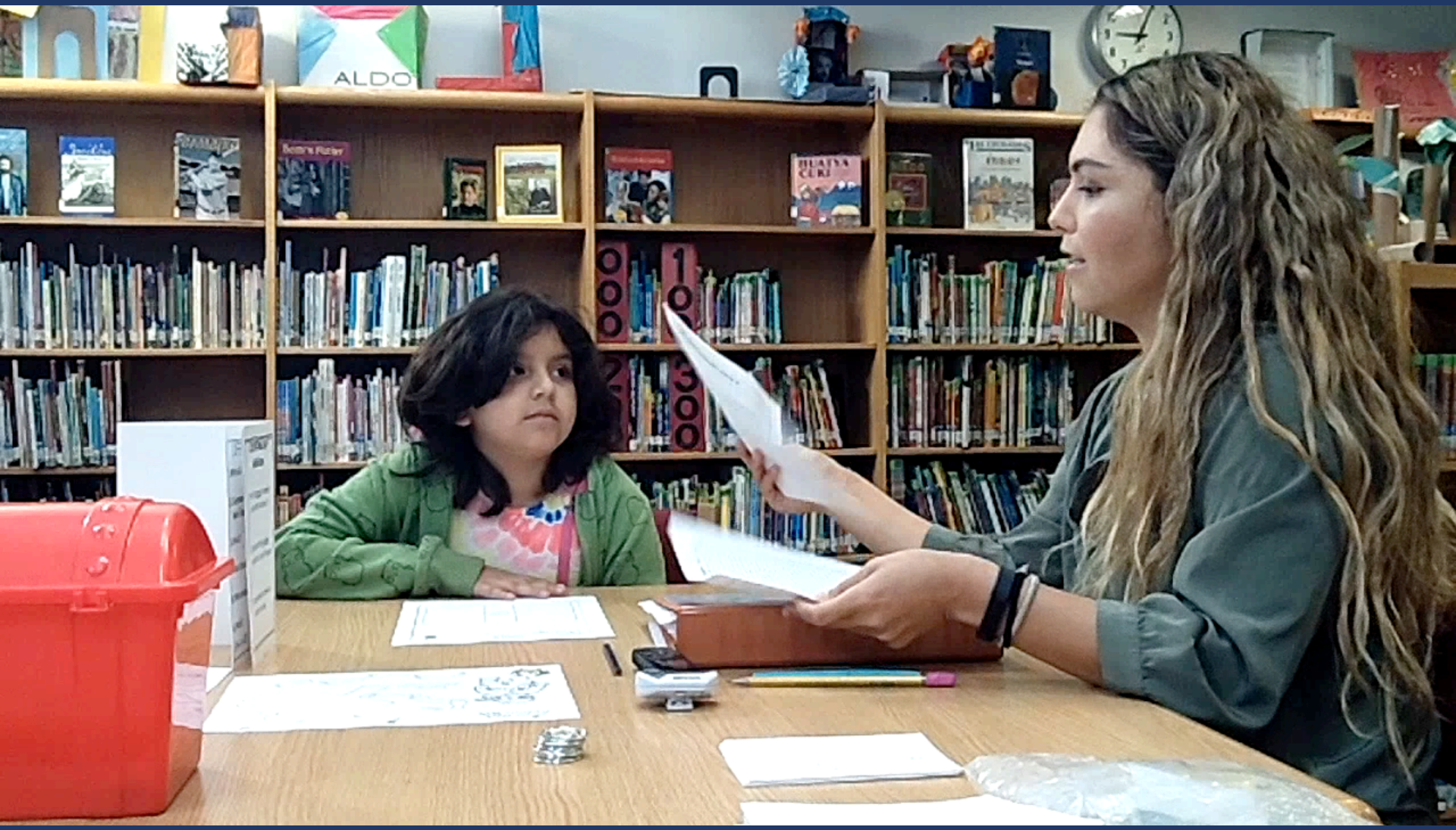


3 + __ = 5 + 4

Equation Quest

- 2 min about the equal sign and solving equations
  - Equal sign defined as “same as”
  - Practice with manipulatives and pictures
  - Practice isolating a variable



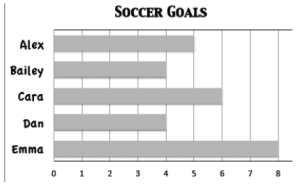


Buccaneer Problems

- 12-15 of instruction related to word-problem schemas
  - Total
  - Difference
  - Change
- 2-3 word problems per session

RUN

If needed, number the graph



1. ***Read*** **the problem**

2. ***Underline*** **the label and ~~cross out irrelevant info~~**

3. ***Name*** **the problem type**

   Total

   Difference

   Change

Total

Parts put together into a **total**

- Jennifer saw **4** cardinals and **5** blue jays. How many birds did Jennifer see?
  - **4** + **5** = **?**
- Jennifer saw **9** birds. If **4** of the birds were cardinals, how many were blue jays?
  - **4** + **?** = **9**
- Jennifer saw **9** birds. **5** of the birds were blue jays, how many were cardinals?
  - **5** + **?** = **9**

Total

"Are parts put together for a total?"

TOTAL

1. Write P1 + P2 = T
2. Find T
3. Find P1 and P2
4. Write the signs
5. Find X

P1 + P2 = T

T C. Gina spent $34 at the post office. It costs $19 to mail packages. Gina spent the rest on stamps. How much did Gina spend on stamps?

P1 + P2 = T
19 + X = 34
-19 -19
0

34
-19
15

X = 15 dallors

Difference

Greater and **less** amounts compared for a **difference**

- Courtney has **9** apples. Silva has **4** apples. How many more apples does Courtney have? (How many fewer?)
  - **9** – **4** = **?**
- Courtney has **5** more apples than Silva. If Silva has **4** apples, how many does Courtney have?
  - **?** – **4** = **5**
- Silva has **5** fewer apples than Courtney. Courtney has **9** apples. How many apples does Silva have?
  - **9** – **?** = **5**

Difference

"Are amounts compared for a difference?"

DIFFERENCE

1. Write G – L = D
2. [Compare sentence] and label G and L
3. Find D
4. Find G and L
5. Write the signs
6. Find X

G – L = D

JOLLY ROGER REVIEW: LESSON 50

[Patrick has 56 more stamps than Josh.] Josh has 33 stamps. Each boy has collected stamps for ~~3 years~~. How many stamps does Patrick have?

D

G

L

X − ~~33~~ = 56
+~~33~~ +33
X = 89
stamps

Notice the use of a word-problem label to accompany the numerical answer

Change

An amount that **increases** or decreases

- Sandra had $4. Then she earned $3 for cleaning her room. How much money does Sandra have now?
  - 4 + 3 = ?
- Sandra has $4. Then she earned money for cleaning her room. Now Sandra has $7. How much money did she earn?
  - 4 + ? = 7
- Sandra had some money. Then she made $3 for cleaning her room. Now she has $7. How much money did Sandra start with?
  - ? + 3 = 7

Change

An amount that increases or **decreases**

- Yolanda baked 9 cookies. Then, she ate 2 of the cookies. How many cookies does Yolanda have now?
  - 9 – 2 = ?
- Yolanda baked 9 cookies. Then, she ate some of the cookies. Now, she has 7 cookies. How many cookies did Yolanda eat?
  - 9 – ? = 7
- Yolanda baked some cookies. She ate 2 of the cookies and has 7 cookies left. How many cookies did Yolanda bake?
  - ? – 2 = 7

Change

"Does an amount increase or decrease?"

CHANGE

1. Write ST +/– C = E
2. Find ST
3. Find C
4. Find E
5. Write the signs
6. Find X

ST +/– C = E

BUCCANEER PROBLEMS: LESSON 40

c+t

A. Malik had 2 peppers. Then, he bought 3 peppers at the store, and his friend gave him 4 peppers from his garden. How many peppers does Malik have now?

ST + C + C = E
2 + 3 + 4 = X

5
+4
9

X = 9 peppers

Equal Groups

Groups with an **equal number** in each group

- Paulo bought 4 boxes of markers with 8 markers in each box. How many markers did Paulo buy?
  - **4 × 8 = ?**
- Paulo had 32 markers. He put the same number of markers into 4 boxes. How many markers were in each box?
  - **4 × ? = 32**
- Paulo had 32 markers. He put 8 markers into each box. How many boxes did Paulo use?
  - **? × 8 = 32**

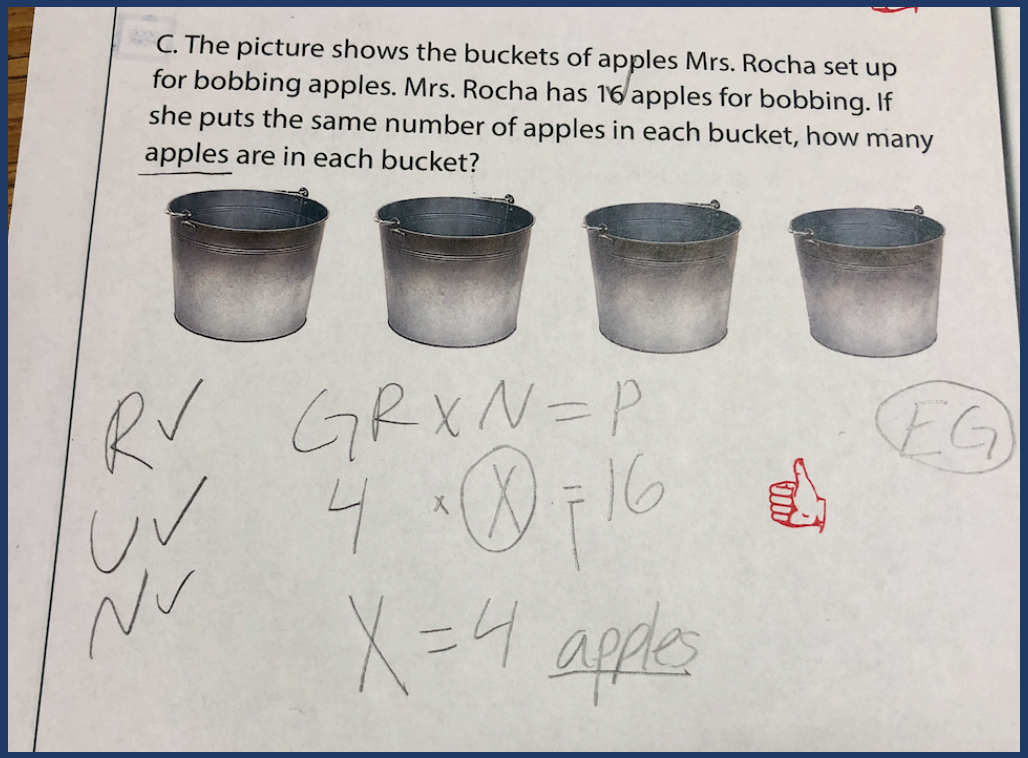
Equal Groups

"Are there groups with the same in each group?"

EQUAL GROUPS

1. Write GR × N = P
2. Find P
3. Find GR and N
4. Write the signs
5. Find X

GR × N = P

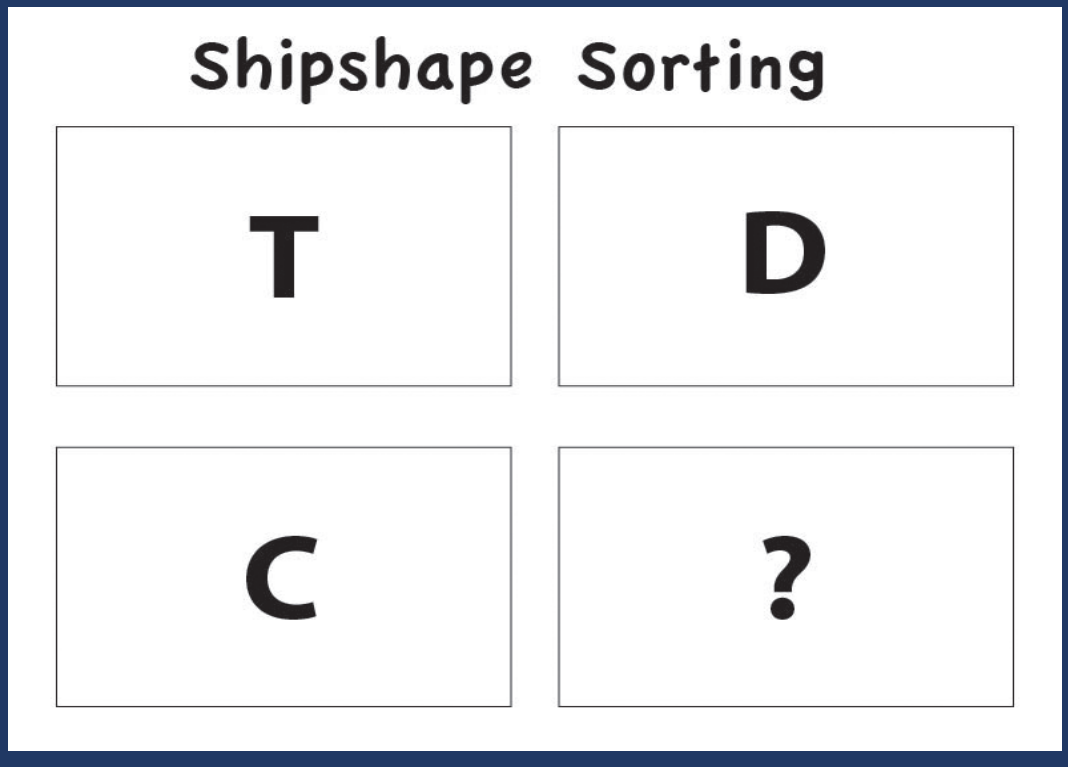


Shipshape Sorting

- 1 min to sort word problems by schema
- Review at end of 1 min

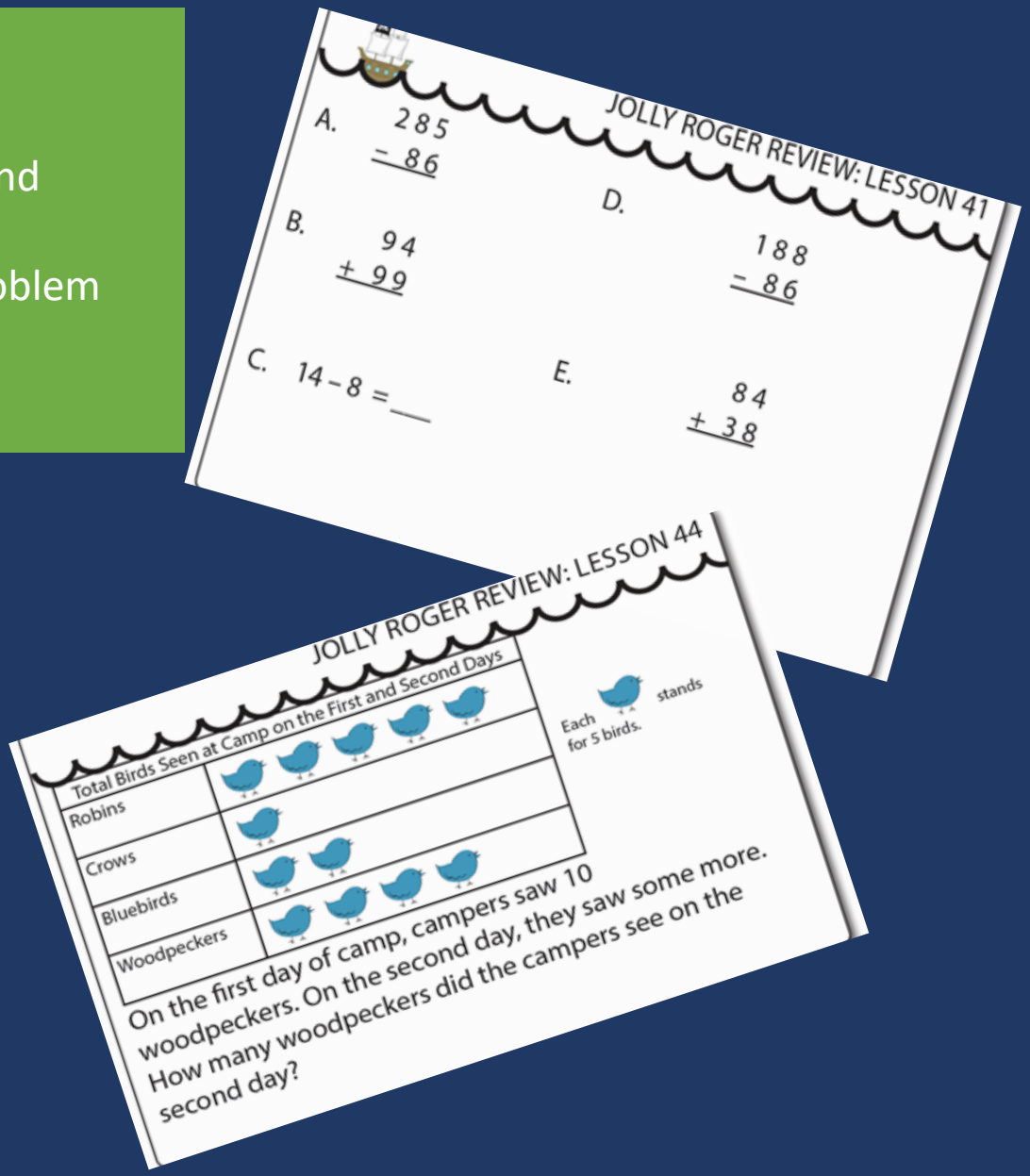
Mrs. Green spent $7 on a movie ticket and $3 on snacks. How much more money did she spend on the movie ticket than on snacks?

Beth played 8 soccer games in June and July. She played 5 games in June. How many games did she play in July?

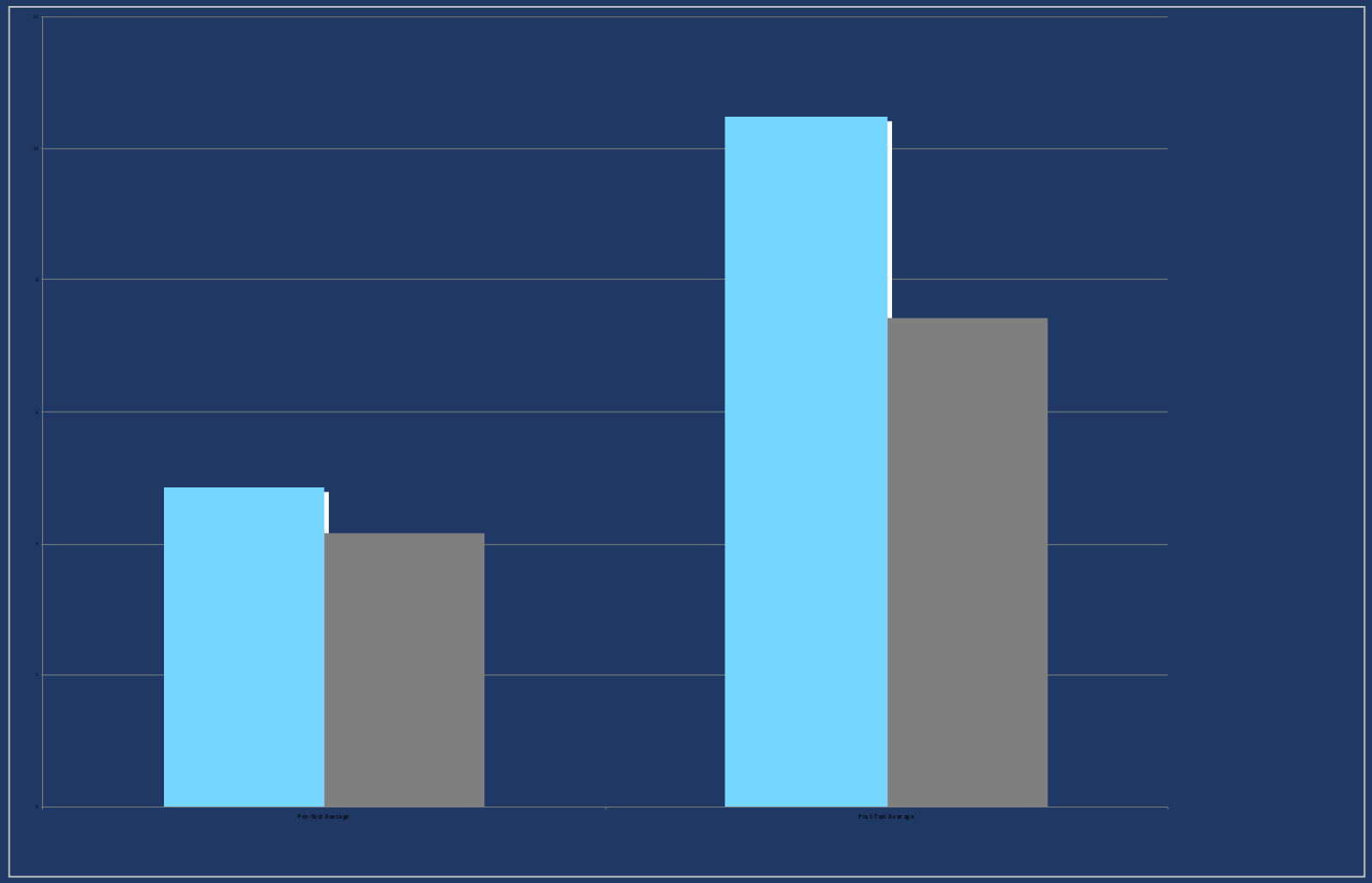


Jolly Roger Review

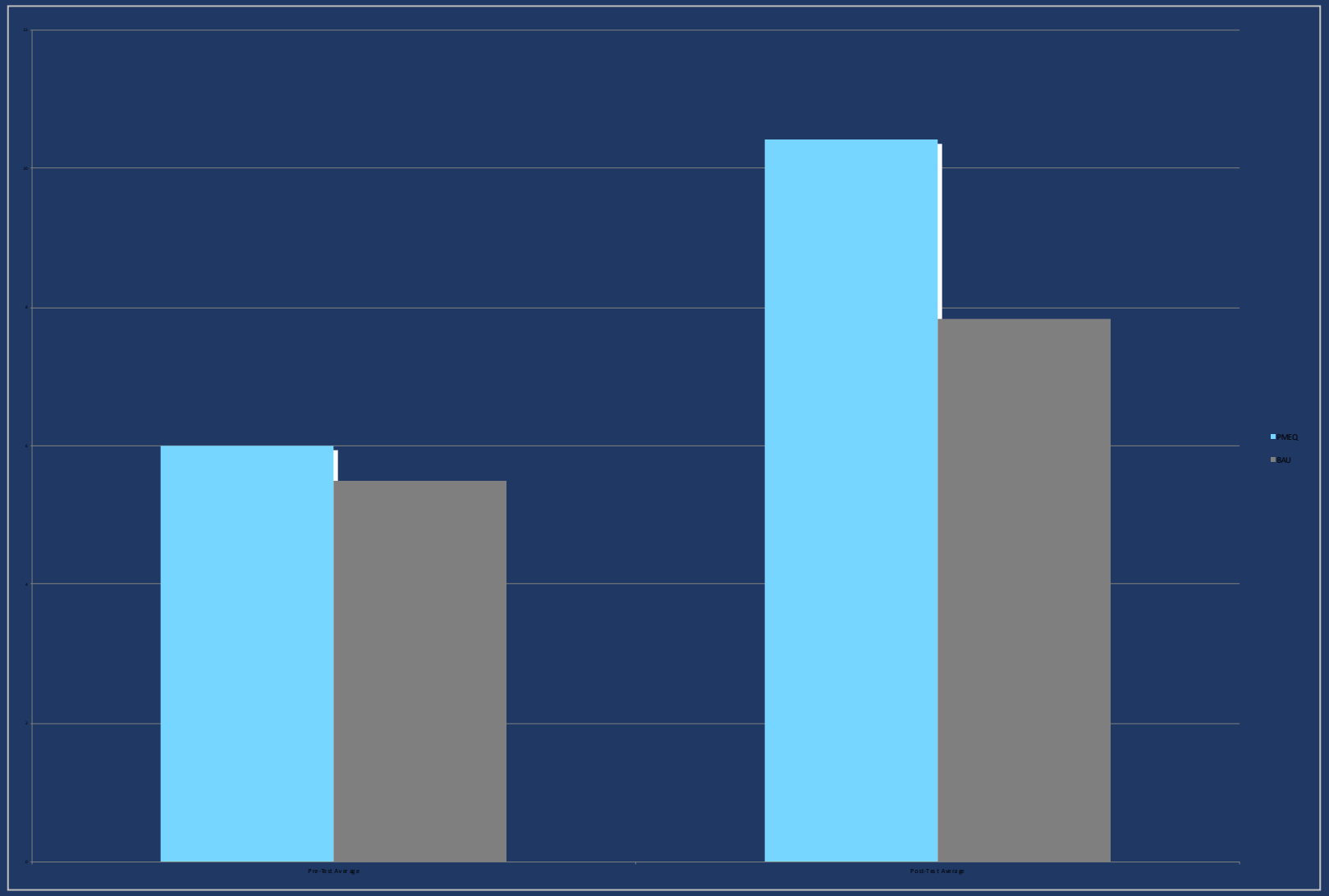
- 1 min to solve addition and subtraction problems
- 2 min to solve a word problem



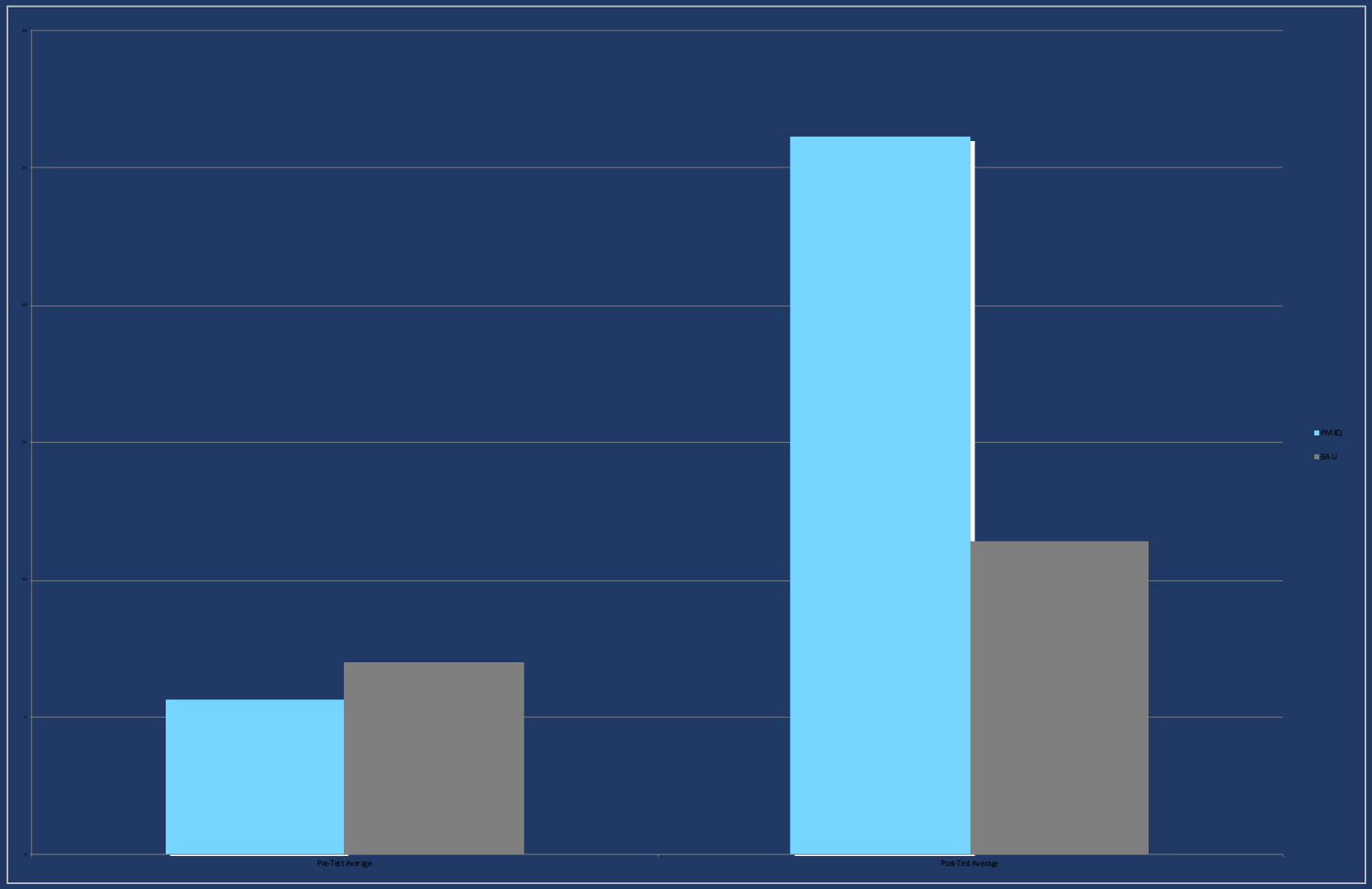
Non-Standard Equation Solving



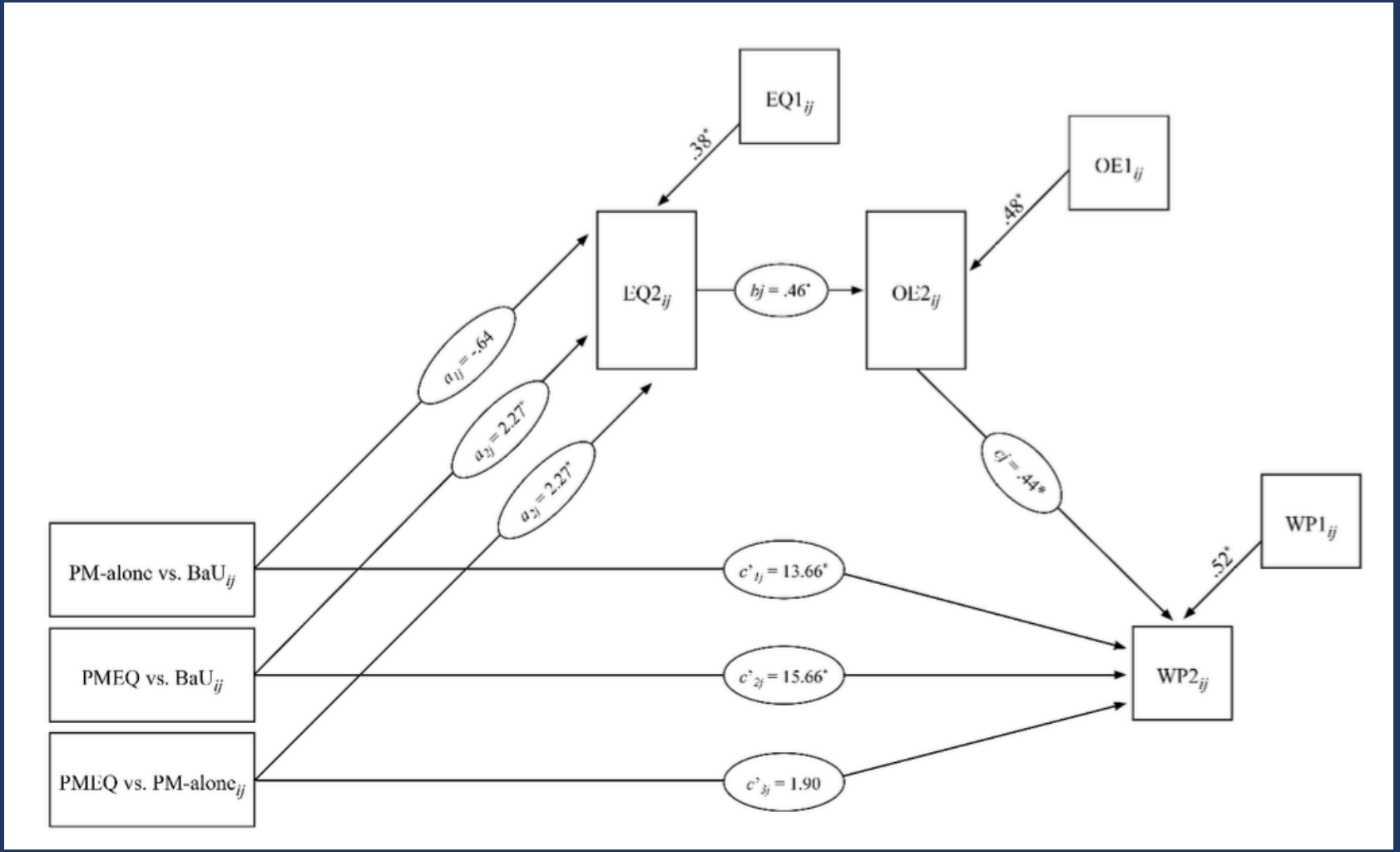
Equal Sign Tasks



Double-Digit Word Problems



Mediation Analysis



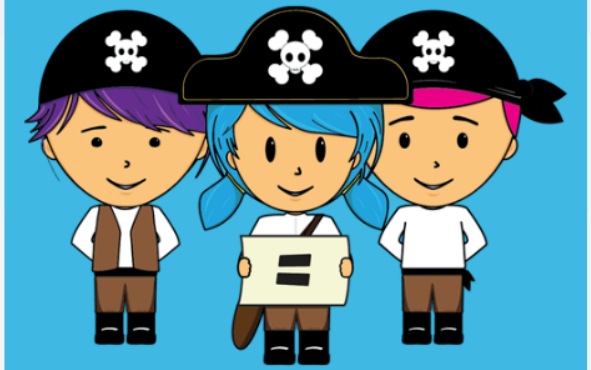
Pirate Math Equation Quest

About Research Individual Small-Group STAAR Videos

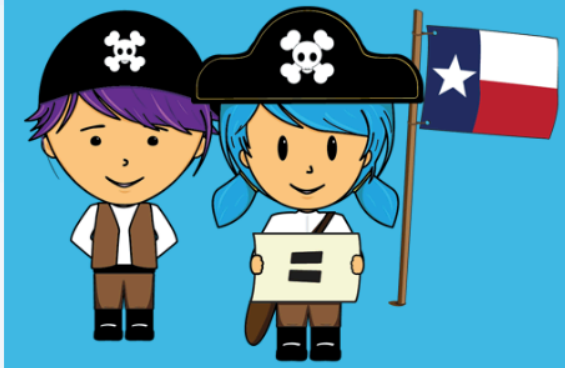
Welcome to Pirate Math Equation Quest!

Individual Word-Problem Intervention

Small-Group Word-Problem Intervention



Small-Group Word-Problem Intervention for STAAR



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