Pirate Math Equation Quest
Small-Group Word-Problem Tutoring
With Total, Difference, Change, and Equal Groups Schemas
Supplemental Materials

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Welcome to *Pirate Math Equation Quest*!

We designed this version of *Pirate Math Equation Quest* as a small-group intervention for use with students at the third-grade instructional level. This version of the program was developed to offer support to Tier-2 and Tier-3 students who require supplemental mathematics remediation in the area of word-problem solving. The focus of the *Pirate Math Equation Quest* small-group intervention is single-digit and double-digit additive and multiplicative word problems that include four schemas: Total, Difference, Change, and Equal Groups.

This manual includes the Supplemental Materials (i.e., posters, maps, cards, graphs, and mats) necessary to implement *Pirate Math Equation Quest* with small groups of 3-4 students. A separate Teacher Manual includes the teacher materials, including the Teacher Lesson Guides and Teacher Activity Guides, needed to implement *Pirate Math Equation Quest*. A separate Student Manual includes the Student Lesson Packets.

Scientific evaluations of *Pirate Math Equation Quest* indicated that at-risk third-grade students (with and without mathematics disabilities) who performed in the lowest 13th percentile of their classes demonstrated improved word-problem performance with *Pirate Math Equation Quest* compared to students who did not participate in *Pirate Math Equation Quest* (Powell, Berry, & Barnes, 2019).
This Supplemental Materials Manual includes the following:

**Supplemental Materials**
- Templates for posters to print for use during lessons
- Four versions of Treasure Maps to print for students during lessons
- Two sets of Math Fact Flashcards (addition and subtraction; multiplication and division) for printing and cutting (answers on back)
- Math Fact Flashcards graph template for graphing students’ highest daily scores
- Shipshape Sorting cards for printing and cutting (answers on back)
- Sorting Mat to print and use during Shipshape Sorting
Pirate Math Equation Quest includes six posters for teachers to display throughout the lessons. Templates for the posters are included in this manual. In the beginning lessons, teachers should display the Pirate Math Rules and Counting Up Addition and Subtraction posters pictured on this page and the following page.

Pirate Math Rules

1. Use inside voice.
2. Stay seated.
3. Follow directions.
4. Try your best.
As teachers introduce the four schemas, Total, Difference, Change, and Equal Groups, they need to display the RUN poster, pictured below, and the corresponding schema posters for students to reference. The RUN poster provides an attack strategy for students to use as they solve word problems.
The schema posters, pictured below and on the following page, provide specific steps for setting up and solving a word problem after identifying the correct schema. Total problems are introduced during Lesson 4, Difference problems are introduced during Lesson 11, Change problems are introduced during Lesson 19, and Equal Groups problems are introduced during Lesson 28.

TOTAL
1. Write $P_1 + P_2 = T$
2. Find $T$
3. Find $P_1$ and $P_2$
4. Write the signs
5. Find $X$

Does $X$ make sense? Why?

$P_1 + P_2 = T$
### 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 $X$
   
   $G - L = D$

---

### CHANGE

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

---

### EQUAL GROUPS

1. Write $GR \times N = P$
2. Find $P$
3. Find $GR$ and $N$
4. Write the signs
5. Find $X$
   
   $GR \times N = P$
After teachers have introduced the Total, Difference, Change, and Equal Groups problems, they should display the What Do You Ask Yourself? poster, featured below. The What Do You Ask Yourself? poster, introduced during Lesson 29, provides a prompt for students to ask questions and gesture to determine the correct schema. We encourage teachers to use gestures to help students recall the four schemas. The Total gesture is introduced in Lesson 4. The Difference gesture is introduced in Lesson 11. The Change gesture is introduced in Lesson 19. The Equal Groups gesture is introduced in Lesson 28. Teachers can refer to the Lesson Guides to learn the specific schema gestures to model for students. Students often struggle to identify the correct problem type after all four schemas have been introduced. This poster helps students to distinguish between the Total, Difference, Change, and Equal Groups schemas.

<table>
<thead>
<tr>
<th>Total</th>
<th>Are parts put together into a total?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference</td>
<td>Are two amounts compared for a difference?</td>
</tr>
<tr>
<td>Change</td>
<td>Is there a start amount that increases or decreases to a new amount?</td>
</tr>
<tr>
<td>Equal Groups</td>
<td>Are there groups with an equal number in each group?</td>
</tr>
</tbody>
</table>

During every lesson, teachers also display the Treasure Map. Throughout each lesson, students can earn coins for their Treasure Map for following the Pirate Math rules. When students reach the end of their Treasure Map, they earn a novelty prize from a treasure box.

If teachers do not have coins, they can use stamps, stickers, or colored pencils to color the designated number of spaces on the Treasure Map. Similarly, teachers can use any prize bag or box if they do not have a treasure box.

On the following pages are four different variations of the Treasure Map. Teachers can choose one map or alternate maps depending on students’ preferences. All four Treasure Map templates are included in this manual.
Group:

Pirate Math Treasure Map

Group:

Pirate Math Treasure Map
For the Math Fact Flashcards Activity, teachers need to cut and print the Math Fact Flashcards and print the Math Fact Flashcards graph. Templates for the Math Fact Flashcards and the Math Fact Flashcards graph are included in this manual.

There are two sets of Math Fact Flashcards for the small group intervention. The first set includes an addition or subtraction problem on the front side of the card and the correct answer on the back side of the card. The second set includes a multiplication or division problem on the front side of the card and the correct answer on the back side of the card. It is recommended that teachers print these cards double-sided on cardstock. There are four problems per page; teachers should cut each page into fourths using a paper cutter.

Teachers also need to print the Math Fact Flashcard Graph, pictured below, in advance of the lesson. At the end of the Math Fact Flashcards activity, students graph their higher score from the two trials on the graph below. Teachers should plan to copy extra graphs for easy access after students complete the first graph.
During Shipshape Sorting, which begins in Lesson 7, students participate in schema sorting practice using sorting cards and the sorting mat, displayed below. Templates for the Shipshape Sorting Mat and accompanying cards are included in this manual.

**Shipshape Sorting**

```
T  D
C  ?
```

The Shipshape Sorting cards include a word problem on the front side of the card and the correct schema (i.e., T for Total, D for Difference, and C for Change) on the back side of the card. It is recommended that teachers print the Shipshape Sorting cards double-sided on cardstock. There are four word problems per page; teachers should cut each page into fourths using a paper cutter. There are no sorting cards for Equal Groups problems. If desired, teachers can create their own Equal Groups sorting cards and a new sorting mat that includes an EG box.

```
Jerry saw 3 sharks at the aquarium. He saw 2 turtles. How many sharks and turtles did Jerry see?

Dante's mom planted 8 trees and rose bushes in the yard. She planted 4 rose bushes. How many trees did she plant?

Ann and Elise sold 7 boxes of Girl Scout cookies. Elise sold 3 boxes. How many boxes of cookies did Ann sell?

Mrs. Towns spent $4 at the grocery store and $5 at the pet store. How much money did she spend in all?
```
Other Materials

The following materials are used throughout the program but are not included in this manual.

- Timer
- Cubes
- Gold coins
- Treasure box
- Dry erase board
- Dry erase markers
- Dry erasers
- Blue painter’s tape

The timer is used during the timed activities: Math Fact Flashcards, Shipshape Sorting, and Jolly Roger Review.

Different colored unit cubes are used during Equation Quest to help students develop their pre-algebraic reasoning skills. The timer and cubes can be purchased from a teacher supply store or a mathematics manipulatives company.

The gold coins and treasure box are used throughout each lesson to reward students for following the Pirate Math rules. As previously mentioned, stamps, stickers, or colored pencils can substitute for gold coins. Teachers can use any prize bag or box if they do not have a treasure box.

The dry erase board, dry erase markers, dry erasers, and blue painter’s tape are used during lessons that include Equal Groups problems (i.e., Lessons 28-39) to help students understand the concept of Equal Groups. Students use these materials to illustrate groups with an equal number in each group. Teachers can purchase these materials from a teacher or office supply store.

For all lessons, teachers and students also need pencils.
Supplemental Materials
Pirate Math Rules

1. Use inside voice.
2. Stay seated.
3. Follow directions.
4. Try your best.
COUNTING UP
Addition

1. Put the greater number in your fist and say it.

2. Count up the number that’s less on your fingers.

3. The sum is the last number you say.

COUNTING UP
Subtraction

1. Put the minus number in your fist and say it.

2. Count up your fingers to the number you start with.

3. The difference is the number of fingers you have up.
**RUN**

1. **Read** the problem
2. **Underline** the label and cross out irrelevant info
3. **Name** the problem type

**Total**

1. Write $P_1 + P_2 = T$
2. Find $T$
3. Find $P_1$ and $P_2$
4. Write the signs
5. Find $X$

**Does $X$ make sense? Why?**

**TOTAL**

$P_1 + P_2 = T$
**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 \( G - L = D \)
6. Find \( X \)

**CHANGE**

1. Write \( ST +/– C = E \)
2. Find \( ST \)
3. Find \( C \)
4. Find \( E \)
5. Write the signs \( ST +/– C = E \)
6. Find \( X \)
EQUAL GROUPS

1. Write $GR \times N = P$

2. Find $P$

3. Find $GR$ and $N$

4. Write the signs

5. Find $X$

$GR \times N = P$

Does $X$ make sense? Why?
What Do You Ask Yourself?

**Total**
Are parts put together into a total?

**Difference**
Are two amounts compared for a difference?

**Change**
Is there a starting amount that increases or decreases to a new amount?

**Equal Groups**
Are there groups with an equal number in each group?
Pirate Math Treasure Map

Group:
Pirate Math
Treasure Map

Group:
Group:

Pirate Math
Treasure Map
\[
\begin{array}{cccc}
0 & + & 0 & = & 0 \\
0 & + & 1 & = & 1 \\
0 & + & 2 & = & 2 \\
0 & + & 3 & = & 3 \\
\end{array}
\]


\[
\begin{align*}
1 + 6 &= \_\_\_\_\_\_ \\
1 + 7 &= \_\_\_\_\_\_ \\
1 + 8 &= \_\_\_\_\_\_ \\
1 + 9 &= \_\_\_\_\_\_
\end{align*}
\]
2 + 8 = 10
2 + 9 = 11
3 + 0 = 3
3 + 1 = 4
\[
\begin{align*}
3 + 6 & = 9 \\
3 + 7 & = 10 \\
3 + 8 & = 11 \\
3 + 9 & = 12
\end{align*}
\]
\[ \begin{align*} 
5 + 2 &= 7 \\
5 + 3 &= 8 \\
5 + 4 &= 9 \\
5 + 5 &= 10 
\end{align*} \]
6 + 0 = 6
6 + 1 = 7
6 + 2 = 8
6 + 3 = 9
\[ \begin{align*}
6 + 4 & = 10 \\
6 + 5 & = 11 \\
6 + 6 & = 12 \\
6 + 7 & = 13 \\
\end{align*} \]
\[ 7 + 2 = 9 \]
\[ 7 + 3 = 10 \]
\[ 7 + 4 = 11 \]
\[ 7 + 5 = 12 \]
7 + 6
7 + 7
7 + 8
7 + 9
8 + 4 = 12
8 + 5 = 13
8 + 6 = 14
8 + 7 = 15
\[
\begin{array}{cc}
3 & 4 \\
- & - \\
1 & 1 \\
\hline
\end{array}
\]

\[
\begin{array}{cc}
5 & 6 \\
- & - \\
1 & 1 \\
\hline
\end{array}
\]
7 - 1

8 - 1

9 - 1

10 - 1
2 - 2 = 0
3 - 2 = 1
4 - 2 = 2
5 - 2 = 3
5  -  3  =  2
6  -  3  =  3
7  -  3  =  4
8  -  3  =  5
- 6

- 6

- 6

- 6
14 \- 6 \\
\hline
8 \- 7 \\
\hline
15 \- 6 \\
\hline
8 \- 7 \\
\hline
9 - 7 = 
10 - 7 = 
11 - 7 = 
12 - 7 =
9

8

- 8

8

9

8

- 8

8

10

- 8

11

- 8
16 \ - \ 8 = \ 8 \\
9 \ - \ 9 = \ 0 \\
17 \ - \ 8 = \ 9 \\
10 \ - \ 9 = \ 1
15 \[ \begin{array}{c}
- \\
9
\end{array} \] 

16 \[ \begin{array}{c}
- \\
9
\end{array} \] 

17 \[ \begin{array}{c}
- \\
9
\end{array} \] 

18 \[ \begin{array}{c}
- \\
9
\end{array} \]
$0 \times 11$  $1 \times 0$

$1 \times 1$  $1 \times 2$
1 \times 10 \\
2 \times 0 \\
1 \times 11 \\
2 \times 1
$\times 2$

$\times 4$

$\times 3$

$\times 5$
\[ \times \quad 2 \quad 6 \quad \times \quad 2 \quad 10 \]

\[ \times \quad 3 \quad 0 \]

\[ \times \quad 11 \]
$3 \times 1$  
$3 \times 2$  
$3 \times 3$  
$3 \times 4$
\[
\begin{array}{cc}
4 \times 0 & 4 \times 1 \\
& \\
4 \times 2 & 4 \times 3 \\
& 
\end{array}
\]
$4 \times 5 = \phantom{0}\phantom{0}$

$4 \times 6 = \phantom{0}\phantom{0}$

$4 \times 10 = \phantom{0}\phantom{0}$

$4 \times 11 = \phantom{0}\phantom{0}$
5 \times 4

5 \times 5

5 \times 6

5 \times 10
$5 \times 11 = 55$

$6 \times 0 = 0$

$6 \times 1 = 6$

$6 \times 2 = 12$
\[ \times 6 \times 6 \]

\[ \times 3 \times 4 \]

\[ \times 5 \times 6 \]

\[ \times 6 \times 6 \]
6 × 10 = 60
6 × 11 = 66
10 × 0 = 0
10 × 1 = 10
\[10 \times 2 = \_
\]
\[10 \times 3 = \_
\]
\[10 \times 4 = \_
\]
\[10 \times 5 = \_
\]
10 \times 6

10 \times 10

10 \times 11

11 \times 0
11 \times 1

11 \times 2

11 \times 3

11 \times 4
\[ \begin{align*}
11 \times 5 &= 55 \\
11 \times 6 &= 66 \\
11 \times 10 &= 110 \\
11 \times 11 &= 121
\end{align*} \]
121 ÷ 11

110 ÷ 11

66 ÷ 11

55 ÷ 11
\[
\begin{align*}
44 & \div 11 \\
\hline
33 & \div 11 \\
\hline
22 & \div 11 \\
\hline
11 & \div 11 \\
\hline
\end{align*}
\]
110 ÷ 10

100 ÷ 10

60 ÷ 10

50 ÷ 10
\[
\begin{align*}
40 \div 10 & = \ ? \\
30 \div 10 & = \ ? \\
20 \div 10 & = \ ? \\
10 \div 10 & = \ ?
\end{align*}
\]
$\frac{24}{6} = 4$

$\frac{18}{6} = 3$

$\frac{12}{6} = 2$

$\frac{6}{6} = 1$
\[ \frac{20}{5} = 4 \]
\[ \frac{15}{5} = 3 \]
\[ \frac{10}{5} = 2 \]
\[ \frac{5}{5} = 1 \]
44 \div 4 = \_

40 \div 4 = \_

24 \div 4 = \_

20 \div 4 = \_
\[
\begin{align*}
\frac{16}{4} & = 4 \\
\frac{12}{4} & = 3 \\
\frac{8}{4} & = 2 \\
\frac{4}{4} & = 1
\end{align*}
\]
\[ \begin{array}{cc}
33 & 30 \\
\div 3 & \div 3 \\
\hline
\end{array} \]

\[ \begin{array}{cc}
18 & 15 \\
\div 3 & \div 3 \\
\hline
\end{array} \]
\[
\begin{align*}
\frac{8}{2} &= \phantom{0}4 \\
\frac{6}{3} &= \phantom{0}2 \\
\frac{4}{2} &= \phantom{0}2 \\
\frac{2}{2} &= \phantom{0}1
\end{align*}
\]
\[
\begin{align*}
\frac{11}{1} &= 11 \\
\frac{6}{1} &= 6 \\
\frac{10}{1} &= 10 \\
\frac{5}{1} &= 5
\end{align*}
\]
<table>
<thead>
<tr>
<th>Math Fact Flash Card Graph</th>
<th>Group:</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
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<td>39</td>
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<td>2</td>
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<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Day</td>
<td></td>
</tr>
</tbody>
</table>
Jerry saw 3 sharks at the aquarium. He saw 2 turtles. How many sharks and turtles did Jerry see?

Dante’s mom planted 8 trees and rose bushes in the yard. She planted 4 rose bushes. How many trees did she plant?

Ann and Elise sold 7 boxes of Girl Scout cookies. Elise sold 3 boxes. How many boxes of cookies did Ann sell?

Mrs. Towns spent $4 at the grocery store and $5 at the pet store. How much money did she spend in all?
Jordan and Michelle have 7 computer games. Jordan has 3 computer games. How many computer games does Michelle have?

Lynn and Doug have $9 together. Doug has $3. How much money does Lynn have?

Tanya saw 5 horses at the circus. She also saw 2 lions. How many horses and lions did Tanya see altogether.

Brittany and Kelly spent $8 on ice cream. Brittany spent $5. How much money did Kelly spend?
Maria has 2 flowers. Jackie has 7 flowers. How many flowers do the girls have in all?

Marcus and Donna ate 6 jelly beans in all. Donna ate 4 jelly beans. How many jelly beans did Marcus eat?

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

Shelby walked 3 blocks to school and 2 blocks to the park. How many blocks did she walk altogether?
Dan and Rachel found 6¢. Rachel found 3¢. How much money did Dan find?

Sasha hit 5 home runs. Jeremy hit 2 home runs. How many home runs did they hit in all?

There are 9 boys and girls in Ms. Wilson’s class. There are 5 boys. How many girls are in the class?

Dean invited 8 boys and girls to his party. He invited 5 girls. How many boys did Dean invite?
Sarah and Katie have $6 to spend at the mall together. Sarah has $1. How much money does Katie have?

At the fair, Brent spent $2 on food. He spent $4 on tickets. How much money did Brent spend in all?

Jake and Greg found 5¢. Greg found 2¢. How much money did Jake find?

There were 7 ghosts and witches at the Halloween party. If there were 2 ghosts, how many witches were there?
Kristen has 2 sticker books. Angie has 4 sticker books. How many sticker books do the girls have in all?

Pam and Patrick have 8 CD’s in all. Patrick has 3 CD’s. How many CD’s does Pam have?

Liz saw 5 movies in April and May. She saw 3 movies in April. How many movies did Liz see in May?

Steven ran 3 miles on Friday and 6 miles on Sunday. How many miles did Steven run altogether?
Natalie and Olivia have 7 Barbie dolls. Natalie has 4 Barbie dolls. How many Barbie dolls does Olivia have?

At the zoo, Ronnie saw 3 giraffes. She saw 4 monkeys. How many giraffes and monkeys did Ronnie see altogether?

Together, David and Missy have $5. Missy has $2. How much money does David have?

Kate and Lauren spent $6 on earrings. Kate spent $2. How much money did Lauren spend?
Anne and Jason had 8¢. Anne had 6¢. How much money did Jason have?

Julia and Chad played card games. Julia won 4 games. Chad won 3 games. How many games did they play in all?

There are 7 cats and dogs at the animal shelter. There are 2 cats. How many dogs are at the shelter?

Bryan invited 8 boys and girls to go roller-skating. He invited 3 girls. How many boys did Bryan invite?
Josh saw 4 rabbits in the woods. He saw 3 squirrels. How many rabbits and squirrels did Josh see?

Sophie and Katie collected 6 cans for the food drive. Katie collected 4 cans. How many cans did Sophie collect?

Hannah has 8 baby rabbits and kittens. She has 2 baby rabbits. How many baby kittens does she have?

Mr. Thomas spent $5 at the hardware store and $3 at the sporting goods store. How much money did he spend in all?
Tommy and John have $5 to spend at the arcade altogether. Tommy has $3. How much money does John have?

At the water park, Brent spent $6 on snacks. He spent $1 on postcards. How much money did Brent spend in all?

Jamie and Gina saved $7. Gina saved $5. How much money did Jamie save?

There were 9 children and adults on the city bus. If there were 4 children, how many adults were there?
Rob has 2 tennis balls and 3 baseballs. How many balls does he have in all?

Eli and his sister have 9 markers. If Eli has 5 markers, how many markers does his sister have?

Robert and Mike walked 4 miles in all. If Mike walked 2 miles, how many miles did Robert walk?

Larry made 4 snowballs. Neil made 3 snowballs. How many snowballs did they make altogether?
Kelly and Don sold 7 pencils at the school store. Kelly sold 2 pencils. How many pencils did Don sell?

Mr. Carey spent $9 to buy a lamp and some books for the library. The books cost $4. How much did the lamp cost?

Jennifer found 5¢ on the sidewalk. Rob has 3¢ in his pocket. How much money do they have altogether?

Ryan has 8 baseball cards in all. His father gave him 5 baseball cards. How many baseball cards did not come from his father?
Mark bought some pencils and erasers. He spent $5 in all. If he spent $3 on erasers, how much money did he spend on pencils?

3 adults and 3 children are riding on the bus. How many people are on the bus altogether?

Dominic and Patty have $8 together. Patty has $5. How much money does Dominic have?

Bob and Jamie have 9 flowers. If Bob has 3 flowers, how many flowers does Jamie have?
Mark and Kayla ate 8 cookies in all. Kayla ate 6 cookies. How many cookies did Mark eat?

Gene bought a flashlight and batteries for $9. The batteries cost $3. How much money did the flashlight cost?

Deon took 5 pictures of his family and 2 pictures of his friends. How many pictures did he take in all?

Dan and Ali collected 9 box tops for the school fundraiser. Ali collected 3 box tops. How many box tops did Dan collect?
Sarah swam 8 laps in the pool altogether. She swam some laps before dinner and some after dinner. If she swam 3 laps before dinner, how many laps did she swim after dinner?

Diana and Lynn baked 6 cupcakes for the holiday party. Lynn baked 2 cupcakes. How many cupcakes did Diana bake?

Patrick spent $5 at McDonald’s. Erika spent $2 at McDonald’s. How much money did they spend altogether?

Annie has 9 cousins in all. 3 of her cousins are boys. How many of her cousins are girls?
Greg made 2 sandwiches on Monday. He made 1 sandwich on Tuesday. How many sandwiches did he make in all?

Erik and his sister have 6 books about dinosaurs. Erik has 4 books. How many books does his sister have?

Abby and Alex hung 5 candy canes on the tree. Alex hung 3 candy canes. How many candy canes did Abby hang on the tree?

Justin has 4 blue marbles. He also has 1 yellow marble. How many marbles does he have?
Emy has 3 snacks. Jess has 2 snacks. How many snacks do they have in all?

John played 3 games of soccer and 2 games of basketball last weekend. How many games did John play in all?
Dan found 3¢ more than Rachel did. Rachel found 2¢. How much money did Dan find?

There were 4 boys and 8 girls in Ms. Wilson’s class. How many fewer boys are there than girls?

Joel found 5 shells on the beach. Adam found 8. How many fewer shells did Joel find than Adam?

Donald has 1 more cousin than Gary. Gary has 6 cousins. How many cousins does Donald have?
Nick dribbled his basketball 3 fewer times than Joe. Joe dribbled 5 times. How many times did Nick dribble his basketball?

Maria has 8 Barbie dolls and Amy has 3 Barbie dolls. How many fewer Barbie dolls does Amy have than Maria?

Jake found 2¢. Greg found 6¢ more than Jake. How much money did Greg find?

Josh spent $3 more on video games than Dustin. Dustin spent $3 on video games. How much did Josh spend?
Maria has 8 flowers. Jackie has 4 flowers. How many more flowers does Maria have than Jackie?

Mrs. Thomas gave out 1 more bag of candy for Halloween than Mrs. Elliot. Mrs. Elliot gave out 3 bags of candy. How many bags of candy did Mrs. Thomas give out?

Mark has 2 more baseball cards than Owen. Owen has 3 baseball cards. How many baseball cards does Mark have?

Jonathan went to the library 3 times this week. Carlos went 5 times. How many more times did Carlos go to the library than Jonathan?
Jason saw 6 monkeys and 2 tigers at the zoo. How many more monkeys did Jason see than tigers?

Heather ate 5 more cookies than Teri. Teri ate 3 cookies. How many cookies did Heather eat?

Tori is 8 years old. Tori’s brother is 2 years younger than her. How old is Tori’s brother?

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?
Holly has 7 dolls. Abby has 5 fewer dolls than Holly. How many dolls does Abby have?

Jenny has 5 more crayons than Brandon. Brandon has 4 crayons. How many crayons does Jenny have?

At the pet store, Amber saw 9 puppies. She saw 4 kittens. How many more puppies did Amber see than kittens?

Sammy spent $1 more at the toy store than Megan did. Sammy spent $8. How much money did Megan spend?
Devin skateboarded for four hours. Kara skateboarded for 2 hours. How many more hours did Devin skateboard for than Kara?

Rick earned $3 more than his brother for doing chores. Rick’s brother earned $2. How much money did Rick earn?

Jade ate 4 more pieces of popcorn than Mike. Mike ate 3 pieces of popcorn. How many pieces of popcorn did Jade eat?

Mike found 9¢ in his pocket. Tom found 3¢ in his backpack. How much more money did Mike find than Tom?
Carly has 4 more teddy bears than baby dolls. If she has 8 teddy bears, how many baby dolls does she have?

John read 8 books last month. Ross read 6 books last month. How many fewer books did Ross read than John?

Amy has $6 more than David. Amy has $8. How much money does David have?

Laura checked out 5 more books from the library than Cara. Cara checked out 3 books. How many books did Laura check out?
Don has $1 more than Matt. If Don has $5, how much money does Matt have?

Adam swam for 5 hours. Becca swam for 3 hours. How many more hours did Adam swim for than Becca?

Todd practiced the piano for 3 hours. Jenn practiced piano for 5 hours. How many fewer hours did Todd practice piano than Jenn?

William played his game for 2 more minutes than John. William played for 6 minutes. How long did John play?
Josh saw 6 rabbits and 2 squirrels in the woods. How many more rabbits did Josh see than squirrels?

Matt studied for 3 fewer hours than Sarah. Sarah studied for 7 hours. How many hours did Matt study for?

Toni has gone to the Science Center 3 more times than Carley. Carley has gone to the Science Center 2 times. How many times has Toni gone to the Science Center?

Michael ate 7 cookies. His sister ate 3 fewer cookies. How many cookies did Michael’s sister eat?
Jamie read 6 fewer pages of her book than Becky. Becky read 9 pages of her book. How many pages did Jamie read?

Jessica won $3 at the fair. Peter won $7. How much less money did Jessica win than Peter?

Megan saved $4. Gina saved $5 more than Megan. How much money did Gina save?

Antonio blew 4 more bubbles with than Peter. Peter blew 2 bubbles. How many bubbles did Antonio blow?
Abby has 4 fewer pages of homework than Kim. Kim has 9 pages of homework. How many pages of homework does Abby have?

Chris has saved $4 for a baseball glove. Tony saved $7. How much more money has Tony saved than Chris?

The coffee shop had 4 more customers than the bookstore. The coffee shop had 7 customers. How many customers did the bookstore have?

Timmy walked 4 fewer blocks than Bobby to school. Bobby walked 8 blocks to school. How many blocks did Timmy walk?
Wendy has been to the zoo 3 fewer times than Kelly. Kelly has been to the zoo 8 times. How many times has Wendy been to the zoo?

Oranges cost 2 cents more than bananas. Bananas cost 6 cents. How much do oranges cost?

There are 6 horses and 3 pigs that live on the farm. How many more horses live on the farm than pigs?

Jodie has 6 sisters. Chad has 3 sisters. How many more sisters does Jodie have than Chad?
Tessa’s mittens cost $2 less than Ellen’s mittens. Ellen’s mittens cost $6. How much money did Tessa’s mittens cost?

Stephanie ate 9 french fries. Lydia ate 7 french fries. How many more french fries did Stephanie eat than Lydia?

A baseball glove costs $4 more than a baseball hat. A baseball hat costs $3. How much money does the glove cost?

Darren ate 6 marshmallows. Trisha ate 2 fewer marshmallows than Darren. How many marshmallows did Trisha eat?
Sue and Alex went to the movies. Alex spent $2 less than Sue. Sue spent $8. How much money did Alex spend?

Erin played tennis for 1 hour longer than Pamela. If Pamela played tennis for 2 hours, how long did Erin play tennis?

Tracy spent $5 on a necklace. Kate spent $3 on a necklace. How much less money did Kate spend than Tracy?

Steve rode his bike 6 more miles than Jack. Jack rode his bike 3 miles. How many miles did Steve ride on his bike?
Wendy has been to the mall 3 fewer times than Kelly. Kelly has been to the mall 8 times. How many times has Wendy been to the mall?

Jacob has $1 less than his sister. Jacob’s sister has $4. How much money does Jacob have?

6 chickens and 3 cows live on a farm. How many more chickens live on the farm than cows?

Jenna saw 5 more witches than ghosts on Halloween. She saw 3 ghosts. How many witches did Jenna see?
It takes Sarah 9 minutes to get to school. It takes Lisa 8 minutes. How much longer does it take Sarah to get to school than Lisa?

Karen has 3 more puppies than David. David has 6 puppies. How many puppies does Karen have?

Kayla has 4 fewer hair ribbons than Brianna. Brianna has 7 hair ribbons. How many hair ribbons does Kayla have?

Ed read 2 books during summer vacation. Monica read 3 books. How many more books did Monica read than Ed?
Tyler and Pablo had $8 to spend at the arcade. Then, they spent some money on games. Now, they have $2 left. How much money did the boys spend?

James and Dustin had some baseball cards. Then, James bought 4 more. Now, they have 6 cards. How many baseball cards did James and Dustin have at first?

At the football game, Eric spent $5 on a hot dog. A few hours later, he spent $3 on an ice cream cone. Now, how much money has Eric spent?

There were 3 girls at the birthday party. Then, some more girls arrived. Now, there are 8 girls at the party. How many more girls arrived?
Victor and Gabby had some money. Then, they spent $1 on bubble gum and have $4 left. How much money did they have at first?

Bailey scored 3 goals at her soccer game. Then, she scored 2 more goals. How many goals has Bailey scored now?

There were 9 boys and girls on the playground. Then, some students went back to class. There are 2 students still on the playground. How many boys and girls went back to class?

Some boys and girls were watching a movie. Then, 3 more kids showed up. Now, there are 7 boys and girls watching the movie. How many boys and girls were watching the movie at first?
Lizzie had 8 M&Ms. Then, Kristen took 4 of them. How many M&Ms does Lizzie have now?

Jonas had some carrots. Then, he ate 4 carrots with his lunch. Now, he has 2 carrots left. How many carrots did Jonas have to start with?

Kim baked 6 cupcakes with her grandma. Then, they baked 2 more cupcakes. How many cupcakes have they baked now?

Jessie earned $7 babysitting last month. Then, she earned $2 more this month. How much money does she have now?
Julia picked 7 blueberries. Then, she gave 1 blueberry to her mom. How many blueberries does Julia have now?

Liz saw 6 movies. Then, she saw some more movies. Now, she has seen 8 movies. How many movies did Liz see?

Tony got some money for his birthday. He bought some donuts for $5. Now he has $3 left. How much money did Tony get for his birthday?

Kim built 2 snowmen. Then, she built 4 more. How many snowmen has she built now?
Kyle checked out 6 books from the library. He read some of them and returned them to the library. Now, he has 2 books left to read. How many books did he return to the library?

Kevin had 6 balloons. Then, he gave 3 balloons away to his friends. How many balloons does he have left?

Laura ate some raisins for a snack. Then, Emily gave her 4 more raisins. Laura ate a total of 9 raisins. How many raisins did she eat at first?

Lynn ate 5 grapes. Then, her dad gave her some more grapes. She ate 8 grapes in all. How many grapes did her dad give her?
Zach collected 5 fireflies. Then, he let 2 of them go. How many fireflies does he still have?

Katie baked 7 muffins for her family. Her family ate some of them. Now, Katie has 3 muffins left. How many muffins did her family eat?

Robin found some money on the ground. Then, Billy gave her $2. Now, Robin has $8. How much money did Robin find on the ground?

Sam made $6 by raking leaves. Then, he used $2 to buy a new rake. How much money does Sam have left?
Rachel saved $8 to buy fish for her tank. She spent some of the money on bubblegum. Now, she has $6. How much money did she spend on bubblegum?

Monica put up 5 tents at the campsite. Then, her brother took down 2 of the tents. How many tents are still up?

David had some money. Then, Missy gave him $2 more. Now, David has $8. How much money did David have to start with?

Kelly had some stamps. Then, she got 4 more stamps. Now, she has 9 stamps. How many stamps did Kelly have to begin with?
Don and Sam had some money. Then, they spent $1 on gumdrops and have $4 left. How much money did they have at first?

First, Julia won 7 games. Then, Julia won 2 more games. How many games has she won now?

There were 7 cats at the animal shelter. Then, some cats were adopted. There are 2 cats still in the shelter. How many were adopted?

Some children were rollerskating with Bryan. Then, 3 more children showed up. Now, there are 8 children rollerskating. How many were there at first?
Josh saw 6 birds in the woods. Then, 4 of the birds flew away. How many birds can Josh see now?

Steve made some pancakes for breakfast. Then, 4 pancakes fell on the floor. There were 5 left. How many pancakes did Steve make?

Allen collected some seashells at the beach. Then, he lost 2 of them. Now, he only has 7 seashells left. How many seashells did he have to begin with?

Destiny had 9 beads on her necklace. Then, 3 of them fell off. How many beads are still on her necklace?
Ms. Reader had 6 pieces of chalk. Some of the chalk broke. Now, Ms. Reader has 4 pieces of chalk. How many pieces of chalk broke?

There were some children in line at the swingset. Then, 2 more children joined the line. Now, there are 7 children in line. How many children were in line at first?

Kevin read 4 pages in his Harry Potter book. Then, he read 5 more pages. How many pages has Kevin read now?

Hannah had 3 pieces of paper. Her mom bought her some more paper at the store. Now, Hannah has 8 pieces of paper. How many pieces did her mom buy her?
Leah had 4 rooms in her dollhouse. Then, her dad built her 2 more rooms. Now, how many rooms are in Leah’s dollhouse?

Amber poured 5 glasses of milk. Then, she gave 3 of the glasses to her friends. How many glasses does she have now?

Dustin ate 6 mints. Then, Amy gave him some more. Dustin ate 8 mints in all. How many mints did Amy give him?

Nancy planted 6 flowers. Some of the flowers died. 4 flowers are alive now. How many flowers died?
Shawn made some snowballs. Then, 2 of them melted. Now, he has 5 snowballs. How many snowballs did Shawn make at first?

Allison had some money. Then, her aunt gave her $7. Now, Allison has $9. How much money did Allison have to start with?

Emy bought 8 bagels. Then, her friends ate 3 of the bagels. How many bagels does Emy have now?

Evan saw 6 fire trucks at the fire station. Then, 2 trucks drove away. Now, how many trucks are at the fire station?
There were 3 pieces of clothing in the dryer. Then, Aaron added 6 more pieces. Now, how many pieces of clothing are in the dryer?

Tony found 7¢ in the couch. He gave some of the money to his dad. Now, he has 2¢. How much money did he give his dad?

Nicholas picked some apples off a tree. He gave 2 of the apples to his family. Now, he has 4 apples. How many apples did he pick off the tree?

There were 6 pieces of fruit in a bowl. Christopher ate some of them. Now there are 3 pieces of fruit. How many pieces of fruit did Christopher eat?
Cary found 4¢. Later that day he found another 1¢. How much money has he found now?

Luke has 6 checkers. Then, he gave 2 away. How many checkers does Luke have now?

There were 2 crayons in the box. Jeremy put some more crayons in the box. Now, there are 8 crayons in the box. How many crayons did Jeremy add?

Rachel did her math homework for 1 hour. Then, she did her reading homework for some more time. Now, Rachel has done 3 hours of homework. How long did Rachel spend on her reading homework?
There were 9 ice cubes in a glass. Some of them melted. Now, there are only 6 ice cubes. How many ice cubes melted?

Sarah saw some deer in the road. 3 more deer joined them. Now, Sarah sees 7 deer. How many deer did Sarah first see in the road?

There were many open swings on the playground. Then, 5 kids started swinging. Now, there are only 4 open swings left. How many swings were there to begin with?

Corey found 7¢. He spent 3¢ on skittles. How much money does Corey have now?
Chase watched 4 cartoons. Then, he watched some more cartoons in the afternoon. He watched 6 cartoons in all. How many cartoons did he watch in the afternoon?

Gabe put some stickers on the board. Then, he put 3 more stickers on it. There were a total of 8 stickers on the board. How many stickers did he put on the board at first?

Anna hid 9 eggs in the yard. Then, Jamie found some of them. Now, there are only 2 eggs in the yard. How many eggs did Jamie find?

There were some pieces of pie in the kitchen. Nathan ate 2 pieces of pie. Now, there are only 2 pieces left. How many pieces of pie were there before Nathan ate some?
6 students were sitting on a bench. 2 of them left. How many students are still sitting on the bench?

Bill and Tina planted 8 trees this weekend. Tina planted 2 trees. How many did Bill plant?

Sally saw 7 ducks swimming in a pond. Some of the ducks flew away. Now, there are 3 ducks swimming in the pond. How many ducks flew away?

Ron has 4 favorite colors. Harry has 6 favorite colors. How many more colors does Harry like than Ron?
Some leaves fell off of a tree on Tuesday. 1 more leaf fell off on Wednesday. 7 leaves fell off all together. How many leaves fell off of the tree on Tuesday?

Toby and his brother have $5 in all. Toby has $3. How much money does his brother have?

There were some pretzels in a bag. Then, Allen ate 5 of them. Now, there are only 4 pretzels left. How many pretzels were in the bag at first?

Eric has 4 books about cars. Patricia has 2 books about cars. How many more books does Eric have than Patricia?
Shipshape Sorting

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