Core Knowledge® MATHEMATICS

Adding and Subtracting Within 20

Student Workbook

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Table of Contents

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Student Workbook

Core Knowledge Mathematics™

Lesson 1: Sums I Know

- Let's see which sums within 10 we know.

Warm-up: Notice and Wonder: Addition Table

What do you notice?
What do you wonder?

	0	1	2	3	4	5	6	7	8	9	10
0	0+0	0+1	0+2	0+3	0+4	0+5	0+6	0+7	0+8	0+9	0+10
1	1+0	1+1	1+2	1+3	1+4	1+5	1+6	1+7	1+8	1+9	
2	2+0	2+1	2+2	2+3	2+4	2+5	2+6	2+7	2+8		
3	3+0	3+1	3+2	3+3	3+4	3+5	3+6	3+7			
4	4+0	4+1	4+2	4+3	4+4	4+5	4+6				
5	5+0	5+1	5+2	5+3	5+4	5+5					
6	6+0	6+1	6+2	6+3	6+4						
7	7+0	7+1	7+2	7+3							
8	8+0	8+1	8+2								
9	9+0	9+1									
10	10+0										

1.1: My Favorite Sum

Pick your favorite sum.

Write the equation: _____

Show why it is your favorite using drawings, numbers, or words.

1.2: Sums I’ve Got

1. Place your cards in a pile face down.
2. Flip the card and say the expression.
3. If you can say the value of the sum quickly, place it under “got it.”
4. If it takes you some time to find the value, place it under “not yet.”

got it	not yet

Lesson 2: Relate Counting to Addition

- Let's add within 10.

Warm-up: Number Talk: 2 or 3 More

Find the value of each expression mentally.

- $4 + 2$
- $5 + 2$
- $5 + 3$
- $6 + 4$

2.1: More Shake and Spill

1. Priya is playing Shake and Spill.
   She spills 7 red counters and 2 yellow counters.
   How many counters did she spill in all?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Tyler spills 5 red counters and 3 yellow counters.
   How many counters did he spill in all?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

3. Clare spills 2 red counters and 8 yellow counters.
   How many counters did she spill in all?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

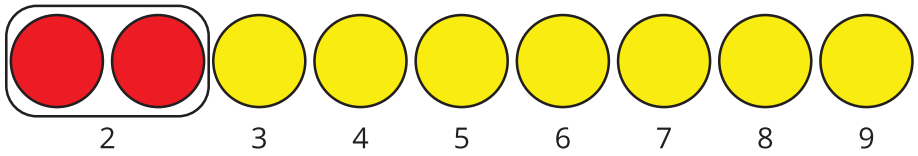
4. Han spills 3 red counters and 6 yellow counters.
   How many counters did he spill in all?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2.2: Are They Both Right?

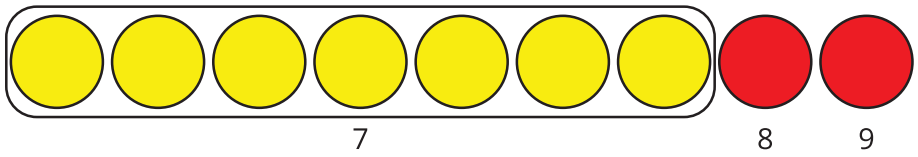
Kiran and Clare are finding the value of $2 + 7$.

Kiran counted on from 2.



$2 + 7 = \boxed{9}$

Clare counted on from 7.



$7 + 2 = \boxed{9}$

How can both methods be correct?
Show your thinking using drawings, numbers, or words.

2.3: Practice Addition within 10

Find the value of each sum.

1. $7 + 2 =$ ☐

2. $3 + 5 =$ ☐

3. ☐ $= 8 + 2$

4. $3 + 6 =$ ☐

5. $5 + 2 =$ ☐

6. $\square = 4 + 4$

7. $2 + 6 = \square$

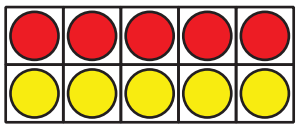
8. $\square = 1 + 9$

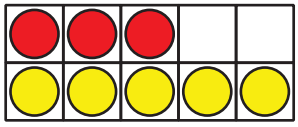
Lesson 3: Are the Expressions Equal?

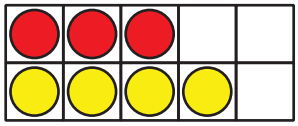
- Let's think about how expressions can be equal.

Warm-up: How Many Do You See: Sums within 10

How many do you see?
How do you see them?







3.2: Are Both Sides Equal?

Determine whether each equation is true or false.
Be ready to explain your reasoning in a way that others will understand.

1. $4 + 2 = 2 + 4$

True or False

2. $3 + 6 = 6 + 4$

True or False

3. $5 + 3 = 1 + 7$

True or False

4. $6 + 4 = 5 + 3$

True or

False

5. $6 + 3 = 9 + 2$

True or

False

If you have time: Change the false equations to make them true.

Lesson 4: Sums of 10

- Let's find all the ways to make 10.

Warm-up: True or False: Equal Expressions

Decide if each statement is true or false.
Be prepared to explain your reasoning.

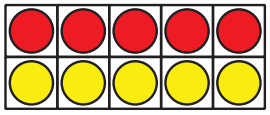
- $3 + 5 = 8$

- $6 + 3 = 8$

- $3 + 5 = 5 + 3$

4.2: All The Ways To Make 10

1. Show all the ways to make 10.



2. How do you know that you have found all the ways?
   Be ready to explain your thinking in a way that others will understand.

4.3: Centers: Choice Time

Choose a center.

Number Puzzles

$14 = 8 + \square$

Check it Off

Find the Pair

Lesson 5: Find the Difference

- Let's find differences within 10.

Warm-up: Number Talk: Missing Value Within 10

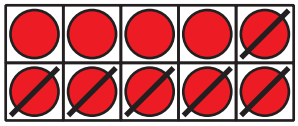
Find the number that makes each equation true.

- $6 + \square = 10$
- $10 - 6 = \square$
- $8 + \square = 10$
- $10 - 2 = \square$

5.1: Different Ways to Find the Difference

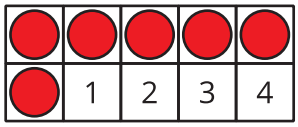
Mai, Diego, and Noah find the value of $10 - 6$.

1. Diego says, “I can take away.”



What does Diego mean?
Be ready to explain your thinking in a way that others will understand.

2. Mai says, “I can count on.”



What does Mai mean?
Be ready to explain your thinking in a way that others will understand.

3. Noah says, “I can use what I know about $6 + 4$ to help me.” What does Noah mean?
   Be ready to explain your thinking in a way that others will understand.

5.2: Subtraction Number Strings

Find the value of each difference in the subtraction string.
Explain what you notice.

Set 1:

$6 - 1$

$6 - 2$

$6 - 3$

$6 - 4$

What do you notice?
Why do you think this happens?
Be ready to explain your thinking in a way that others will understand.

Set 2:

$9 - 8$

$9 - 7$

$9 - 6$

$9 - 5$

What do you notice?
Why do you think this happens?
Be ready to explain your thinking in a way that others will understand.

5.3: The Value of the Difference

Find the value of each difference.

1. $9 - 6$

2. $10 - 3$

3. $7 - 3$

4. $9 - 5$

5. $8 - 6$

6. $6 - 5$

7. $9 - 4$

8. $10 - 7$

Lesson 6: Story Problems within 10

- Let’s solve story problems.

Warm-up: Notice and Wonder: Han's Cup

What do you notice?
What do you wonder?

Han is playing Shake and Spill.
He has some counters in his cup.
Then he puts more counters in his cup.

6.1: A Shake and Spill Story Problem

Han is playing Shake and Spill.
He has some counters in his cup.
Then he puts 3 more counters in his cup.
Now he has 10 counters in his cup.
How many counters did he start with?
Show your thinking using drawings, numbers, or words.

Equation: _____

6.2: Shake and Spill Story Problems

1. Noah is playing Shake and Spill with 10 counters.
   4 of the counters fall out of the cup.
   How many counters are still in the cup?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Kiran has 4 counters in a cup.
   He doesn't have enough so he puts more counters in.
   Now he has 7 counters in his cup.
   How many more counters did Kiran put in his cup?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

3. Clare has some counters in a cup.
   She puts 3 more counters in her cup.
   Now she has 9 counters in her cup.
   How many counters were in her cup before she added more?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

4. Priya has some counters in a cup.
   She has 2 red counters and 8 yellow counters.
   How many counters does she have?
   Show your thinking using drawings, numbers, or words.

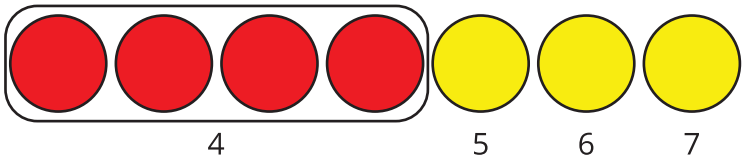
   Equation: _____

Section Summary

Section Summary
We practiced adding within 10.

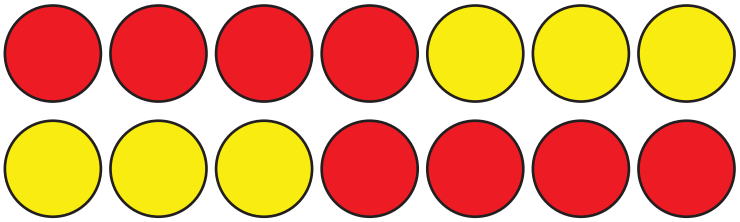
We counted on.

$$4 + 3 = \boxed{7}$$



We added in any order.

$4 + 3$ is the same amount as $3 + 4$.



We learned that when expressions have the same value, you can show that with an equal sign.

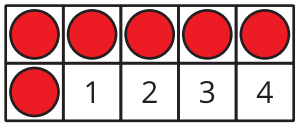
$$4 + 3 = 3 + 4$$

We learned that we can use addition to find the difference between 2 numbers.

$$10 - 6 = \square$$

$$6 + \square = 10$$

Since I know 6 + 4 = 10, then I know 10 - 6 = 4.



Lesson 7: Center Day 1

- Let’s play games to practice adding.

7.2: Centers: Choice Time

Choose a center.

Number Puzzles

$14 = 8 + \square$

Find the Pair

Compare

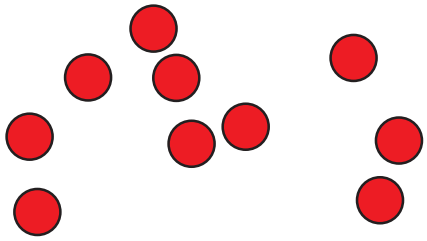
Lesson 8: Ten as a Unit

- Let's explore teen numbers.

Warm-up: Which One Doesn't Belong: Groups of 10

Which one doesn't belong?

A



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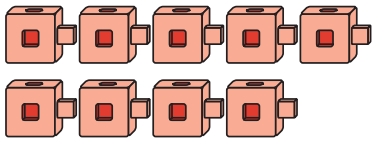

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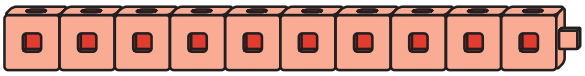

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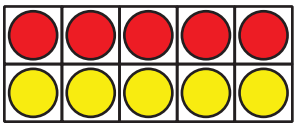
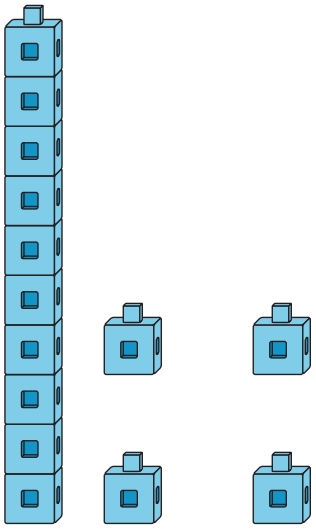


8.2: Building Teen Numbers



Choose 4 numbers to represent.
Circle them.

10 11 12 13 14 15 16 17 18 19

Use connecting cubes to show each number like Clare did.

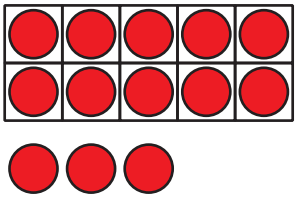
What did you notice as you were showing each number?

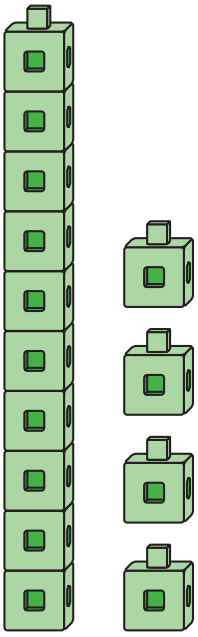
Lesson 9: Addition With a Ten

- Let's use a ten to make teen numbers.

Warm-up: Notice and Wonder: Teen Numbers

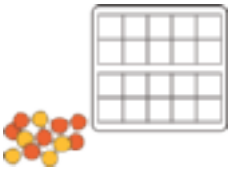
What do you notice?
What do you wonder?





9.1: Make It: Teen Numbers and 10-Frames

Use your 10-frames to build teen numbers.
Write an equation that matches the teen number.



teen number	equation

If you have time, write another equation for each of the teen numbers.

9.2: Equations With a Ten

Find the number that makes each equation true.
Show your thinking using drawings, numbers, or words.

1. $14 = 10 + \square$

2. $10 + 5 = \square$

3. $16 = \square + 6$

4. $10 + \square = 12$

5. $\square + 3 = 13$

6. $13 = \square + 10$

Lesson 10: Addition and Subtraction with a Ten

- Let's add and subtract with teen numbers.

Warm-up: Number Talk: A Ten and Some Ones

Find the value of each expression mentally.

- $10 + 4$
- $14 - 4$
- $5 + 10$
- $15 - 5$

10.1: Story Problems With a Ten

1. Kiran has a collection of 5 baseball caps.
   He gets some more baseball caps for his birthday.
   Now he has 15 baseball caps all together.
   How many baseball caps did he get?
   Show your thinking using drawings, numbers, or words.

Equation: _____

Equation: _____

2. Priya has a comic book collection.
   She gets 3 new comic books.
   Now she has 13 comic books.
   How many comic books did she have to start?
   Show your thinking using drawings, numbers, or words.

Equation: _____

Equation: _____

10.2: Related Equations

Mai is finding the missing number in $16 - 10 = \square$.

She says, “I can use what I know about 10 and some ones to help.”

What does Mai mean?

Find the number that makes each equation true.
Show your thinking using drawings, numbers, or words.

1. $15 - 10 = \square$

2. $\square = 13 - 3$

3. $8 = 18 - \square$

4. $2 + \square = 12$

Lesson 11: Add to a Teen Number

- Let's add to teen numbers.

Warm-up: True or False: Teen Numbers

Decide whether each statement is true or false.
Be prepared to explain your reasoning.

- $10 + 4 = 10 + 5$

- $10 + 3 = 2 + 1 + 10$

- $14 = 10 + 4 + 5$

11.1: Rock Collection

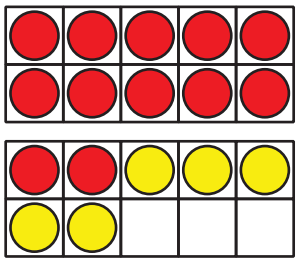
Kiran collects rocks.
So far he has 14 rocks.
He goes on a hike and collects 3 more rocks.
How many rocks does Kiran have?
Show your thinking using drawings, numbers, or words.

Equation: _____

11.2: Write Equations: Adding on to Teen Numbers

Find the number that makes each equation true.
Show your thinking using drawings, numbers, or words.

1. $12 + 5 = \square$



2. $6 + 11 = \square$

3. $\square = 17 + 2$

4. $4 + 14 = \square$

5. $\square = 15 + 4$

6. $16 + 2 = \square$

11.3: Centers: Choice Time

Choose a center.

Compare

Number Puzzles

$14 = 8 + \square$

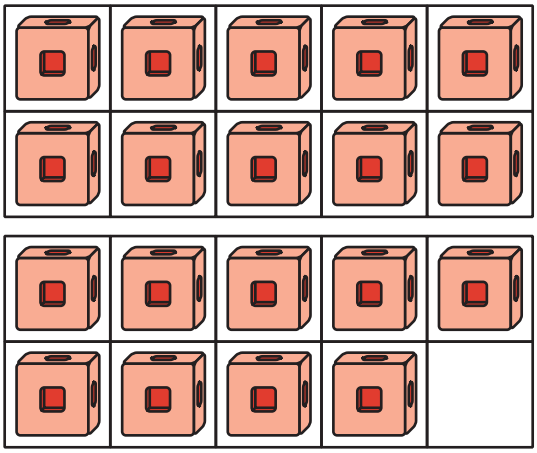
Find the Pair

Lesson 12: Subtract From a Teen Number

- Let’s subtract and add within 20.

12.1: Noah's Collection

Noah likes to collect game pieces.
He has 19 game pieces arranged like this in his bin.



He takes out 8 game pieces to play with.
How many game pieces are left in the bin?
Show your thinking using drawings, numbers, or words.

Equation: _____

12.2: Addition and Subtraction Equations with Teen Numbers

Find the number that makes each equation true.

Be ready to explain your thinking in a way that others will understand.

1. $13 + 4 = \square$

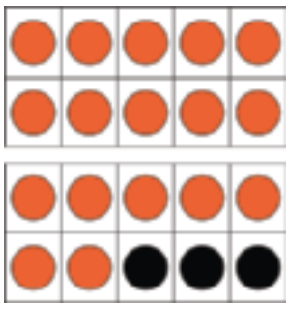
2. $16 + \square = 17$

3. $19 - 8 = \square$

4. $14 - 2 = \square$

5. $11 + \square = 17$

6. $\square + 1 = 18$



Lesson 13: More Story Problems with Teen Numbers

- Let's solve story problems.

Warm-up: Number Talk: Add Ones

Find the value of each expression mentally.

- $3 + 4$
- $4 + 3$
- $10 + 3$
- $14 + 3$

13.1: Sitting or Standing

1. There are students standing in the classroom.
   Some of the students sit down on the rug.
   There are still some students standing.

2. There are 15 students standing in the classroom.
   Some of the students sit down on the rug.
   There are still 5 students standing.
   How many students sat down on the rug?
   Show your thinking using drawings, numbers, or words.

Equation: _____

13.2: Solve Story Problems and Compare Methods

1. There are 17 students in the classroom.
   4 students go home.
   How many students are still in the classroom?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. There are 17 students in the classroom.
   Some students go home.
   Then there are 4 students in the classroom.
   How many students went home?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

13.3: Centers: Choice Time

Choose a center.

Shake and Spill

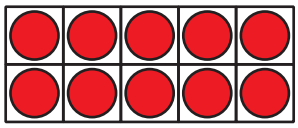
Compare

Number Puzzles

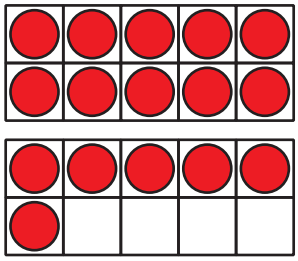
$14 = 8 + \square$

Section Summary

Section Summary
We learned that 10 ones make a ten.



We learned that all teen numbers can be represented as a ten and some ones.



We used that understanding to find missing numbers in addition and subtraction equations with teen numbers.

$10 + \square = 16$

$13 - 10 = \square$

$10 + 2 = \square$

$19 - 9 = \square$

$5 + \square = 15$

We solved a new type of story problem where we don't know how many to subtract. We used different equations to match the story.

There are 17 students in the classroom.
Some students go home.
Then there are 4 students in the classroom.
How many students went home?

$17 - \square = 4$

$17 - 4 = \square$

Lesson 14: Center Day 2

- Let's play games to practice adding and subtracting.

Warm-up: True or False: Expressions on Both Sides

Decide whether each statement is true or false.
Be prepared to explain your reasoning.

- $3 + 2 = 3 + 2$

- $5 + 1 = 5 + 2$

- $4 + 6 = 3 + 7$

14.2: Centers: Choice Time

Choose a center.

Number Puzzles

$14 = 8 + \square$

Shake and Spill

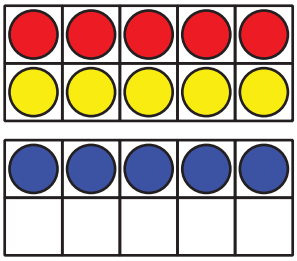
Compare

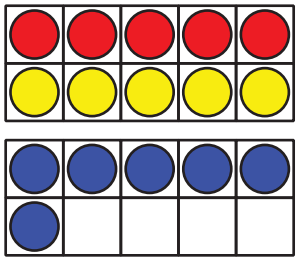
Lesson 15: Solve Story Problems with Three Numbers

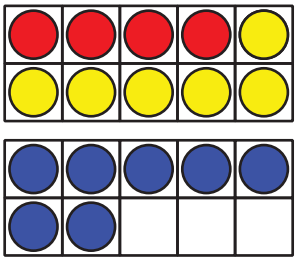
- Let’s solve story problems with 3 numbers.

Warm-up: How Many Do You See: 10-frames

How many do you see?
How do you see them?







15.1: Louis Agassiz Fuertes's Birds

7 blue birds fly in the sky.
8 brown birds sit in a tree.
3 baby birds sit in a nest.
How many birds are there altogether?
Show your thinking using objects, drawings, numbers, or words.

Equation: _____

15.2: Fuertes's Bird Cards

1. Noah collected 3 bird picture cards.
   Clare collected 4 cards.
   Jada collected 7 cards.
   How many cards did they collect altogether?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Jada used her cards to name the birds she saw.
   She saw 4 orioles.
   She saw 2 goldfinches.
   She saw 8 sparrows.
   How many birds did Jada see?
   Show your thinking using drawings, numbers, or words.

Equation: _____

3. Write your own problem.
   We see some birds.
   We see 9 _____.
   We see 8 _____.
   We see 1 _____.
   How many birds do we see altogether?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

4. $10 + 6 + 4 =$ ☐

Show your thinking using drawings, numbers, or words.

5. $5 + 9 + 5 =$ ☐

Show your thinking using drawings, numbers, or words.

Lesson 16: Add Three Numbers

- Let’s add 3 numbers.

Warm-up: Number Talk: Related Expressions

Find the value of each expression mentally.

- $7 + 10$

- $7 + 2 + 8$

- $10 + 9$

- $4 + 9 + 6$

16.1: Match Expressions

Draw a line to match expressions with the same value.

expressions with 3 numbers	$10 + \square$ expression
1. $4 + 6 + 8$	$10 + 1$
2. $3 + 6 + 7$	$10 + 2$
3. $9 + 1 + 1$	$10 + 3$
4. $8 + 4 + 2$	$10 + 4$
5. $5 + 5 + 9$	$10 + 5$
6. $7 + 3 + 3$	$10 + 6$
7. $5 + 10 + 5$	$10 + 7$
8. $4 + 7 + 6$	$10 + 8$
9. $9 + 5 + 1$	$10 + 9$
10. $1 + 10 + 1$	$10 + 10$

If you have time: Write another expression with 3 numbers. 2 of the numbers should make 10.

Ask your partner to think of the matching $10 + \square$ expression.

16.2: Is the Equation True?

Determine whether each equation is true or false.
Be ready to explain your reasoning in a way that others will understand.

1. $7 + 3 + 4 = 10 + 4$


True or 
False

2. $6 + 5 + 4 = 15 + 10$


True or 
False

3. $9 + 10 = 9 + 10 + 1$


True or 
False

4. $3 + 7 + 8 = 8 + 10$

True or

False

5. $5 + 10 + 5 = 10 + 10$

True or

False

If you have time:

1. Make any false equations true.

2. Write 1 equation that is true and 1 that is false. Switch with your partner.

16.3: Write Expressions

Write a $10 + \square$ expression that has the same value as each expression.

1. $5 + 7 + 5$

2. $3 + 7 + 6$

3. $1 + 9 + 9$

4. $4 + 8 + 6$

5. $8 + 10 + 2$

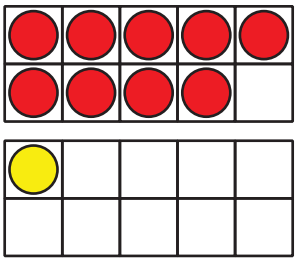
If you have time, write as many expressions as you can with 3 numbers that are equal to $10 + 5$.

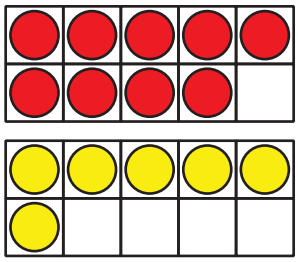
Lesson 17: Make 10 to Add

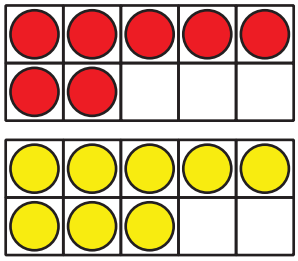
- Let's look for patterns and think about making 10 as we add.

Warm-up: How Many Do You See: Double 10-frames

How many do you see?
How do you see them?







17.1: The 9 Plus Game

- Put out 9 counters.
- Pick a number card and add that many counters.
- Write an equation to represent the counters.
  Can you write more than one?

Equations:

Round 1: _____

Round 2: _____

Round 3: _____

Round 4: _____

Round 5: _____

17.2: Clare's Birds

1. Clare draws some birds.
   She draws 3 birds in a nest and 9 birds flying.
   How many birds did she draw?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Clare draws birds that like warm weather.
   She draws 6 toucans and 8 parrots.
   How many birds did she draw?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

3. Clare draws birds that like cold weather.
   She draws 7 penguins and 5 owls.
   How many birds did she draw?
   Show your thinking using drawings, numbers, or words.

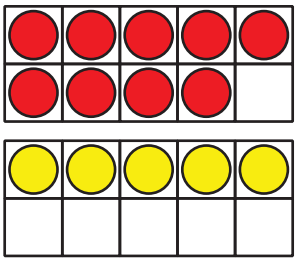
Equation: _____

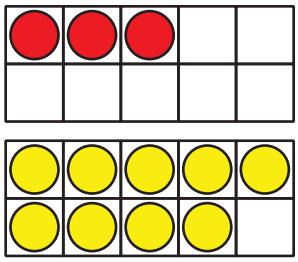
Lesson 18: Patterns in Addition

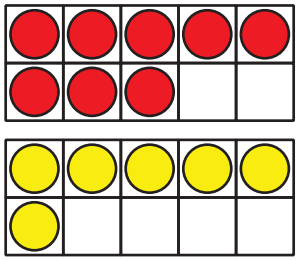
- Let's look for and use patterns to help us add within 20.

Warm-up: How Many Do You See: More Double 10-frames

How many do you see?
How do you see them?







18.1: Expression Match

1. Take out all the expression cards that have the number 10.

2. Mix up the rest of the cards.

3. Pick a card.

4. Place the card under the expression with 10 that it is equal to.

18.3: Centers: Choice Time

Choose a center.

Shake and Spill

Compare

Number Puzzles

$14 = 8 + \square$

Lesson 19: Methods for Addition Within 20

- Let’s add within 20.

Warm-up: Number Talk: Related Expressions

Find the value of each expression mentally.

- $5 + 8$

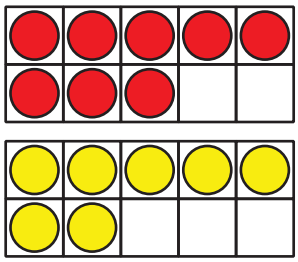
- $6 + 7$

- $8 + 7$

- $6 + 9$

19.1: Lin, Han, and Kiran Add

Lin, Han, and Kiran are finding the value of $8 + 7$.



Lin thinks about $8 + 2 + 5$.

Han thinks about $7 + 7 + 1$.

Kiran thinks about $8 + 8 - 1$.

Explain how each student's method works.
Show your thinking using drawings, numbers, or words.

19.2: How Did You Add?

- Choose an addition card.
- Each partner finds the value independently.
- Each partner gives a signal when they are ready to explain their thinking.
- Each partner shares their thinking.
- Each partner writes the equation.

Choose your favorite equation.
Show how you found the value using drawings, numbers, or words.

Lesson 20: A Trip to the Zoo

- Let's solve story problems.

Warm-up: Number Talk: Using $10 + \square$

Find the value of each expression mentally.

- $8 + 2 + 4$

- $8 + 6$

- $7 + 3 + 6$

- $7 + 9$

20.1: How Many Reptiles?

Jada went to the zoo with her family.
They went to the reptile exhibit and saw 8 snakes, 7 iguanas, and 5 frogs.

How many reptiles did Jada's family see?
Show your thinking using drawings, numbers, or words.

20.2: Zoo Exhibits

1. In the bird exhibit, Jada saw 3 herons, 6 hawks, and 7 hummingbirds.
   How many birds did Jada see?
   Show your thinking using drawings, numbers, or words.

2. Next Jada went to the large cat exhibit.
   There were 8 lions, 4 tigers, and 3 cheetahs.
   How many large cats were there?
   Show your thinking using drawings, numbers, or words.

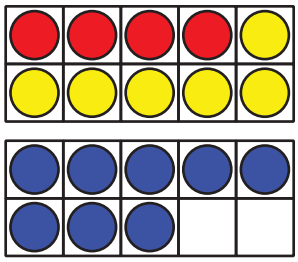
3. Finally, Jada went to the petting zoo.
   She petted 8 goats, 7 sheep, and 4 pigs.
   How many animals did Jada pet?
   Show your thinking using drawings, numbers, or words.

Section Summary

Section Summary

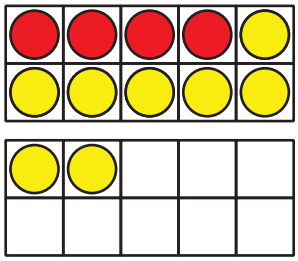
We saw that making a ten could help when we add 3 numbers together.

$$4 + 8 + 6 = 10 + 8 = 18$$



We saw that making a ten could also help when we add 2 numbers together.

$$4 + 8 = 4 + 6 + 2 = 10 + 2 = 12$$



Lesson 21: Center Day 3

- Let’s play games where we add and subtract.

Warm-up: What Do You Know About 20?

What do you know about 20?

Lesson 22: Subtract from Teen Numbers

- Let's subtract from a teen number.

Warm-up: Number Talk: Subtract from a Teen Number

Find the value of each expression mentally.

- $14 - 4$
- $14 - 5$
- $17 - 7$
- $17 - 9$

22.1: Subtraction Methods

Elena has 16 crayons.
She gives 7 crayons to Diego.
How many crayons does she have left?
Show your thinking using drawings, numbers, or words.

22.2: Number Card Subtraction

1. Choose a teen number card.
2. Choose a number card to subtract.
3. Find the difference.
4. Write an equation.

My equations:

Pick your favorite equation.
Show how you found the value of the difference using drawings, numbers, or words.

Lesson 23: Use a Ten to Subtract

- Let's use 10 to help us subtract.

Warm-up: Number Talk: Subtract to Make 10

Find the value of each expression mentally.

- $17 - 7$
- $17 - 7 - 1$
- $17 - 8$
- $17 - 9$

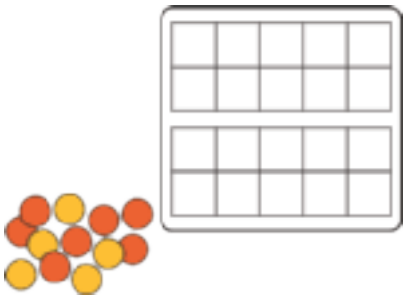
23.1: Number Card Subtraction with 10-frames

1. Choose a teen number card.
2. Build the number on 10-frames.
3. Choose a number card to subtract.
4. Find the difference.
5. Write an equation.

My equations:

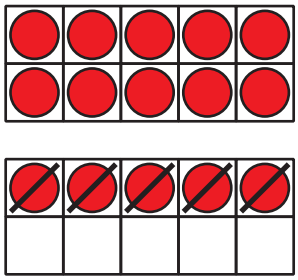
Pick your favorite equation.

Show how you found the value of the difference using drawings, numbers, or words.



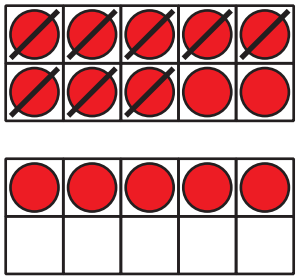
23.2: Diego and Andre Find the Difference

Diego is playing Number Card Subtraction.
He started with 15 and then picked an 8.
He started out by doing this:



What could Diego do next to find the difference?

Andre was also finding the value of $15 - 8$.
He started out by doing this:



What could Andre do next to find the difference?

Find the value of each difference using Diego's way or Andre's way.

1. $14 - 5$

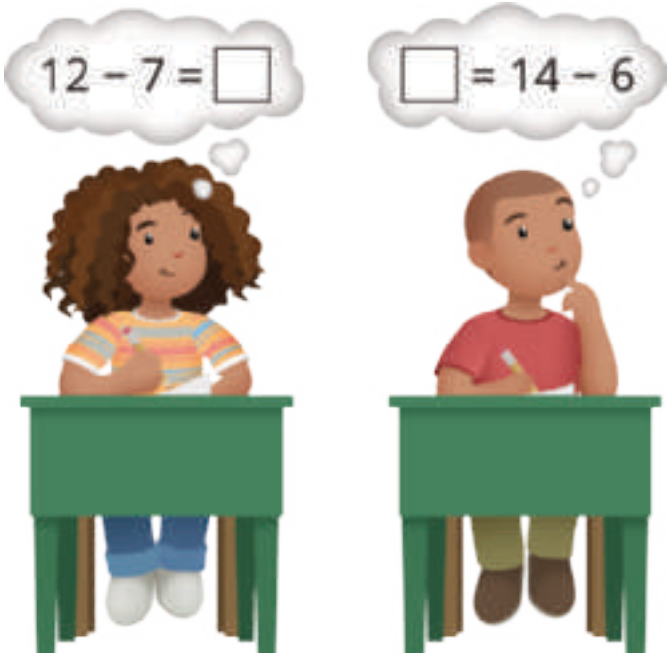
   Show your thinking using drawings, numbers, or words.

2. $13 - 6$

   Show your thinking using drawings, numbers, or words.

Lesson 24: Relate Counting to Addition and Subtraction

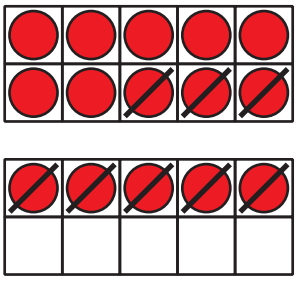
- Let's subtract by counting on or taking away.



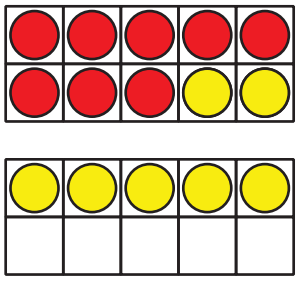
24.1: Different Ways to Subtract

Yesterday, we saw Diego's method to find the value of $15 - 8$.

Diego's way



Tyler's way



Find the value of each difference using Diego's way, then using Tyler's way.

Diego's Way

Tyler's Way

1. $16 - 3$

Diego's Way | Tyler's Way

2. $17 - 8$

3. $18 - 15$

24.2: Find the Number That Makes Each Equation True

Find the number that makes each equation true.
Be sure you can explain your thinking in a way that others will understand.

Set A:

1. $12 - 7 = \square$

2. $18 - 5 = \square$

3. $\square = 14 - 6$

4. $15 - 12 = \square$

5. $13 - 4 = \square$

Set B:

1. $5 + \square = 18$

2. $13 = \square + 6$

3. $20 = 15 + \square$

Lesson 25: How Do You Want to Subtract?

- Let’s use subtraction methods that work for the numbers in a problem.

25.1: Choose Your Own Subtraction Method

1. $20 - 15 =$ ☐

   Show your thinking using drawings, numbers, or words.

2. $19 - 3 =$ ☐

   Show your thinking using drawings, numbers, or words.

3. $13 - 5 =$ ☐

   Show your thinking using drawings, numbers, or words.

4. $18 - 9 =$ ☐

Show your thinking using drawings, numbers, or words.

5. $17 - 15 =$ ☐

Show your thinking using drawings, numbers, or words.

25.2: Solve Story Problems

1. There are 12 pencils on the table.
   The teacher picks up 7 pencils.
   How many pencils are still on the table?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Clare collects 8 glue sticks from the red table.
   She collects some more from the blue table.
   Now she has 15 glue sticks.
   How many did she collect from the blue table?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

3. Kiran has 17 crayons.
   He gives some to his friends.
   Now he has 9 crayons.
   How many did he give to his friends?
   Show your thinking using drawings, numbers, or words.

Equation: _____

Lesson 26: What's the Story?

- Let's solve story problems.

Warm-up: Number Talk: Subtract 10 or More

Find the value of each expression mentally.

- $15 - 10$
- $15 - 12$
- $16 - 10$
- $16 - 13$

26.1: Solve Related Story Problems

1. Elena has 6 counters.
   She gets some more counters.
   Now she has 18 counters.
   How many more counters did Elena get?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

2. Elena has 18 counters.
   She gets rid of some counters.
   Now she has 6 counters.
   How many counters did Elena get rid of?
   Show your thinking using drawings, numbers, or words.

Equation: _____

26.2: More Story Problems

Story Problem 1

Han has some pencils.
He gets 9 pencils from the art store.
Now he has 15 pencils.
How many pencils did Han have to start?

Story Problem 2

Han has 15 pencils.
He gives some pencils to his friends.
Now he has 9 pencils.
How many pencils did Han give to his friends?

Story Problem 3

Han has 9 pencils.
He gets some more pencils from the art store.
Now he has 15 pencils.
How many pencils did he get from the art store?

Story Problem 4

Han has 15 pencils.
He gives 9 pencils to his friends.
How many pencils does Han have now?

Show your thinking using drawings, words or numbers.

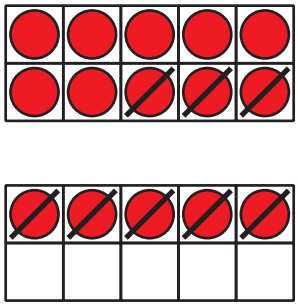
Equation: _____

Section Summary

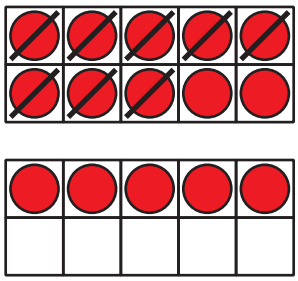
Section Summary
We used different methods to subtract within 20.

We used take away methods.

$15 - 8$



We used a ten to take away 8.



We used counting on methods.

$15 - 8$
8. . . 9, 10, 11, 12, 13, 14, 15

Use ten to help count on.
$8 + 2 = 10$
$10 + 5 = 15$
$2 + 5 = 7$

Lesson 27: Center Day 4

- Let's play games to practice addition and subtraction.

Warm-up: Number Talk: Subtract 10

Find the value of each expression mentally.

- $20 - 10$
- $20 - 10 - 1$
- $18 - 10 - 4$
- $18 - 14$

27.2: Introduce Compare, Add and Subtract Within 20

Choose a center.

Compare

Five in a Row

How Close?

Lesson 28: Around the Room

- Let's write addition and subtraction story problems.

Warm-up: Notice and Wonder: Counting Things in the Classroom

What do you notice?
What do you wonder?

28.1: Writing Classroom Story Problems

Noah had 8 pencils.
Elena had 5 pencils.
Han had 4 pencils.

1. Addition story problem:

Solve the story problem.
Show your thinking using drawings, numbers, or words.

Equation: _____

2. Subtraction story problem:

Solve the story problem.
Show your thinking using drawings, numbers, or words.

Equation: _____

28.3: Poster Gallery Walk

Let's solve our classmates' story problems.

1. Solve the story problem using drawings, numbers, or words.

   Equation: _____

2. Solve the story problem using drawings, numbers, or words.

   Equation: _____

3. Solve the story problem using drawings, numbers, or words.

Equation: _____

4. Solve the story problem using drawings, numbers, or words.

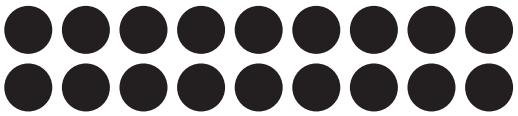
Equation: _____

Section A: Practice Problems

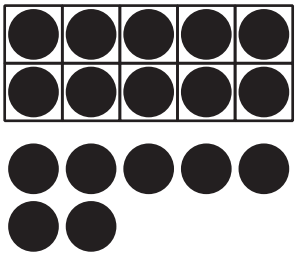
1. **Pre-unit**

For each picture, write a number for how many you see.

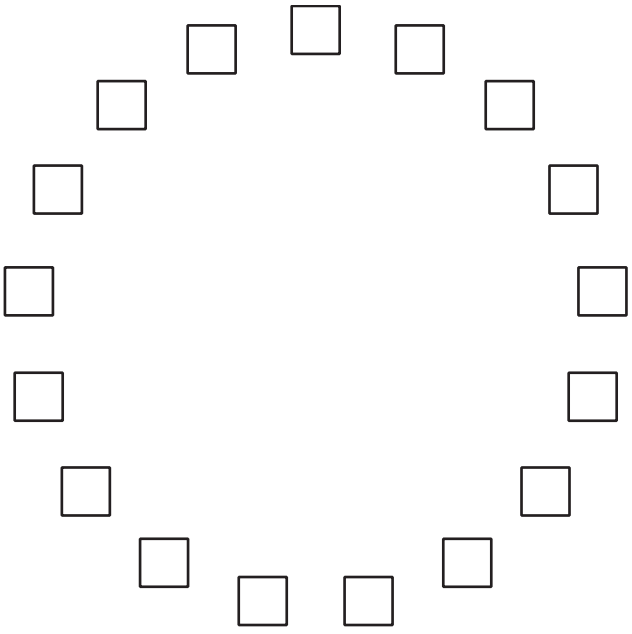
a.



b.

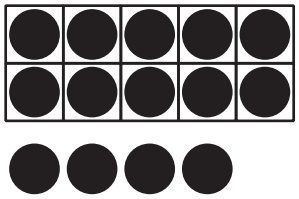


c.

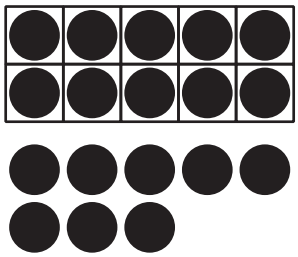


2. **Pre-unit**

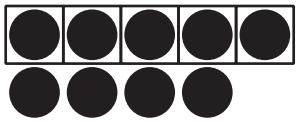
Match each picture with an expression.



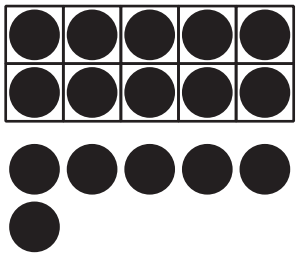
$10 + 8$



$5 + 4$



$10 + 4$



$10 + 6$

3. **Pre-unit**

There were 5 monkeys swinging in the tree.
Then 2 more monkeys came to join them.
How many monkeys are in the tree now?
Show your thinking using drawings, numbers, or words.

4. Find the value of each sum.

a. $7 + 1$

b. $4 + 2$

c. $5 + 5$

(From Unit 3, Lesson 1.)

5. Find the value of each sum.

a. $6 + 2$

b. $1 + 8$

c. $2 + 7$

d. $9 + 1$

(From Unit 3, Lesson 2.)

6. Select **3** true equations.

A. 7 + 2 = 5 + 4

B. 1 + 6 = 3 + 2

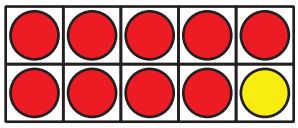
C. 4 + 4 = 2 + 6

D. 5 + 3 = 5 + 4

E. 3 + 7 = 5 + 5

(From Unit 3, Lesson 3.)

7. a. Write an equation that matches this 10-frame.



b. Write 2 equations that show other ways to make 10.

(From Unit 3, Lesson 4.)

8. Find the value of each expression.
Show your thinking using drawings, numbers, or words.

a. $4 + 3$

b. $7 - 3$

c. $8 - 2$

(From Unit 3, Lesson 5.)

9. There are some counters in the cup.
   Lin puts in 5 more counters.
   Now there are 9 counters in the cup.
   How many counters were in the cup before Lin added more?
   Show your thinking using drawings, numbers, or words.

   (From Unit 3, Lesson 6.)

10. **Exploration**

    Here are some numbers: 1 2 4 5 7

    a. Can you make 10 using **2** of the numbers? Show your thinking using drawings, numbers, or words.

    b. Can you make 10 using **3** of the numbers? Show your thinking using drawings, numbers, or words.

11. **Exploration**

Find the number that makes each equation true.
Show your thinking using drawings, numbers, or words.

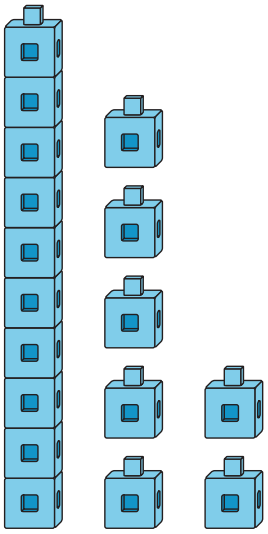
a. $7 + 2 = \square + 5$

b. $3 + \square = 5 + 5$

c. $\square + 1 = 3 + 5$

Section B: Practice Problems

1. a. How many cubes are there?
   How do you see them?



b. Show 14 with connecting cubes.

(From Unit 3, Lesson 8.)

2. Find the number that makes each equation true.
   Show your thinking using drawings, numbers, or words.

   a. $10 + 3 = \square$

   b. $10 + \square = 13$

(From Unit 3, Lesson 9.)

3. a. Find the number that makes each equation true.

   $18 - \square = 10$ $\qquad$ $10 + \square = 18$

   b. How are the 2 equations the same?
   How are they different?

(From Unit 3, Lesson 10.)

4. Find the number that makes each equation true.

a. $15 + 1 = \square$

b. $12 + 6 = \square$

c. $\square = 10 + 7$

d. $\square = 13 + 5$

(From Unit 3, Lesson 11.)

5. Find the number that makes each equation true.

a. $18 - 3 = \square$

b. $17 - \square = 10$

c. $13 + \square = 17$

d. $15 + 5 = \square$

e. $16 - 2 = \square$

(From Unit 3, Lesson 12.)

6. There are 12 kids playing soccer.
   Then 4 more come to play with them.
   How many kids are playing soccer now?
   Show your thinking using drawings, numbers, or words.

   Equation: _____

   (From Unit 3, Lesson 13.)

7. **Exploration**

   Jada has 17 cards on her desk.
   She gives Han 4 cards.
   Now Han and Jada have the same number of cards.
   How many cards were on Han's desk to start?
   Show your thinking using drawings, numbers, or words.

8. **Exploration**

Jada has 14 cards on her desk.
Han has 15 cards on his desk.
Jada gives Han 3 cards.

a. How many cards does Jada have on her desk now?
Show your thinking using drawings, numbers, or words.

b. How many cards does Han have on his desk now?
Show your thinking using drawings, numbers, or words.

9. **Exploration**

number	name
16	sixteen
17	seventeen
18	eighteen
19	nineteen

What do you notice about the numbers and names in the table?

Section C: Practice Problems

1. There are 5 bananas, 6 oranges, and 4 apples in a bowl.
   How many pieces of fruit are in the bowl?
   Show your thinking using objects, drawings, numbers, or words.

   Equation: _____

   (From Unit 3, Lesson 15.)

2. Select **3** expressions that are equal to $10 + 8$.

   A. 5 + 5 + 8

   B. 9 + 7 + 3

   C. 1 + 9 + 9

   D. 3 + 8 + 7

   E. 8 + 4 + 6

   (From Unit 3, Lesson 16.)

3. Find the value of each sum.
   Show your thinking using drawings, numbers, or words.

   a. $9 + 6$

   b. $4 + 9$

   c. $7 + 5$

   d. $8 + 4$

(From Unit 3, Lesson 17.)

4. Select **3** expressions that have the same value as 10 + 3.

A. 9 + 4

B. 2 + 12

C. 5 + 8

D. 7 + 6

E. 5 + 9

(From Unit 3, Lesson 18.)

5. Find the value of each sum.
   Show your thinking using drawings, numbers, or words.

   a. $3 + 9$

   b. $6 + 5$

   c. $8 + 7$

(From Unit 3, Lesson 19.)

6. Jada has 6 connecting cubes.
   Han has 8 connecting cubes.
   Lin has 5 connecting cubes.
   How many cubes do Jada, Han, and Lin have all together?
   Show your thinking using drawings, numbers, or words.

(From Unit 3, Lesson 20.)

7. **Exploration**

   a. Tyler started counting up from 3.
      Mai started counting back from 15.
      Which number do Tyler and Mai say at the same time?
      Show your thinking using drawings, numbers, or words.

   b. Clare started counting up from 1.
      Andre started counting back from 20.
      Do Andre and Clare say the same number at the same time?
      Show your thinking using drawings, numbers, or words.

8. **Exploration**

a. Write an addition story problem using 3 numbers from the list:

3 5 7 4 9 6

b. Solve your story problem.

c. Write an equation that matches the story problem.

Equation: _____

Exchange your story with a classmate and solve each other's problem.

Section D: Practice Problems

1. Find the number that makes each equation true.
   Show your thinking using drawings, numbers, or words.

   a. $12 - 3 = \square$

   b. $19 - 5 = \square$

   (From Unit 3, Lesson 22.)

2. Find the value of each difference.
   Show your thinking using drawings, numbers, or words.

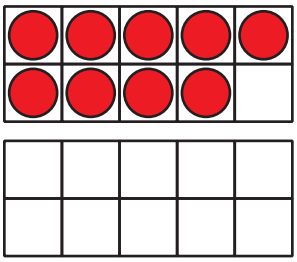
   a. $16 - 10$

   b. $16 - 9$

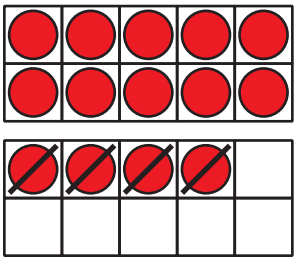
   (From Unit 3, Lesson 23.)

3. Find the value of each difference.
   Use the 10-frames if they help.

   a. $13 - 9$



   b. $14 - 6$



(From Unit 3, Lesson 24.)

4. Find the number that makes each equation true.

   a. $15 - 11 = \square$

   b. $14 - 5 = \square$

   (From Unit 3, Lesson 25.)

5. There are some children skating on the pond.
   Then 8 more children come to join them.
   Now there are 14 children skating on the pond.
   How many children were skating on the pond before more joined?
   Show your thinking using drawings, numbers, or words.

   (From Unit 3, Lesson 26.)

6. **Exploration**

Mai was playing Number Card Subtraction.
She started with a teen number.
Then she drew a card and subtracted.
Mai's answer was the same as the number she subtracted.
What could Mai's teen number and card have been?

7. **Exploration**

Find the value of the expression in as many ways as you can.

$16 - 9$

What is your favorite way?

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