

Tier 3 Intervention Lessons

2.0A.2b

Learning Target: I will subtract numbers within 20

Readiness for 2.NBT.5b: Subtract 2-digit numbers

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Tier 3 Intervention Planning Guide

Learning Target: I will subtract numbers to 20

Readiness for adding and subtracting 2-digit numbers

	Recommended Actions
Beginning (5 min.)	 Review the learning target with the whole group Ask each student to set a goal for the day based on their previous Quick Check Score Have each student use a highlighter to plot their goal for the day
Middle (15 min.)	 Model solving a word problem – "I do" (Sessions 1, 3 and 6 only) Guided Practice – "We do" Sessions 1 and 2: Subtract within 20 using counters and the "think add to subtract" strategy. Sessions 3, 4 and 5: Subtract within 20 using drawings and the "think add to subtract" strategy. Sessions 6, 7 and 8: Subtract within 20 using number bonds and the "think add to subtract" strategy.
End (10 min.)	 Bring the students back together. Ask students to reflect on their progress towards the learning target What did I learn today about counting? How confident do you feel about counting on my own? (Thumbs up, down, or sideways) Assess each student's progress using the next Quick Check form Guide students to self-correct their Quick Check Guide students to chart their progress in their Growth Chart If not using Delta Math lessons, record the activity in the table Collect each student's Quick Check and Growth Chart
After Session 6	 Differentiation Options: Allow students who met the learning goal to work independently while others do the guided practice during the next session Exit students who met the learning goal for a third time Problem solve with a team to plan additional support for students who do not meet the learning goal within 8 sessions



Session 1: Modeling (I Do)

Learning Target: I will subtract numbers to 20

Readiness for adding and subtracting 2-digit numbers

Josiah brought 13 cookies to share with his friends. He gave 5 of them away before lunch. How many cookies did Josiah have to give away during lunch?



Readiness for adding and subtracting 2-digit numbers

Josiah brought 13 cookies to share with his friends. He gave 5 of them away before lunch. How many cookies did Josiah have to give away during lunch?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about. This problem is about Josiah sharing cookies with his friends. Second, I need to determine what I need to find. I need to find the number of cookies Josiah had left to share during lunch. Third, I need to determine what I know. I know that he shared 5 cookies with friends before lunch. Fourth, I need to figure out what I can try. Session 2: Modeling (I Do) MATH I am going to try modeling the actions using counters. I will place 13 counters, red-side up, on the double 10-frame to represent the cookies Josiah gave away before lunch. (Place 13 counters red-side up.) 13 - 5 = Since Josiah is giving away cookies, I will model this problem using subtraction... **13 – 5.** (Place the Subtract Within 20: Equation card above the 10 frames.) Next, I will turn 5 counters over to their yellow-sides to represent the cookies Josiah shared before lunch. (Flip 5 counters over to their yellow-sides.) This leaves 8 red counters that represent the cookies Josiah has left to share with friends during lunch. 5 + ___ = 13 Last, I need to make sure that my answer makes sense.

I found that Josiah has 8 cookies to share during lunch. It makes sense because I knew how much he started with and the part he gave away before lunch. And, I modeled the problem with counters to find the unknown part.

I also know that the two parts added together must equal the total.

Can you see the addition problem, 5 plus 8 equals 13, on the double 10-frame mat?

Anytime I need to subtract a part from a total, I can think addition...the part plus what number equals the total. (Place the Ten-equation card "5 + ____ = 13" and answer under the double 10-frames.)

5 plus what number equals 13? 8





Modeling & Guided Practice Cards

Use for Modelling	Use for Problem 1
13 – 5 =	14 – 9 =
Use for Problem 2	Use for Problem 3
Use for Problem 4	Use for Problem 5
Use for Problem 6	Use for Problem 7
Use for Problem 8	Use for Problem 9
Use for Problem 10 $12 - 6 = $	



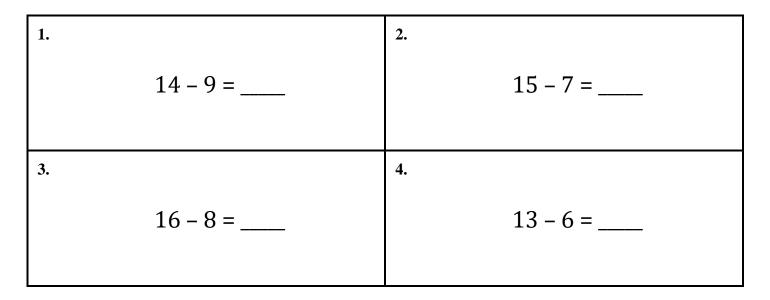
5 + = 13	9 + = 14
7 + = 15	8 + = 16
6 + = 13	5 + = 12
8 + = 13	8 + = 11
6 + = 15	5 + = 13
6 + = 12	

Session 1: Guided Practice (We Do)

Materials:

- 2-colored counters (20 per student)
- Double 10-frame mat (1 per student)
- Subtract Within 20 Equation Cards with Answers (1 set per student)
- Add to Subtract Cards (1 set per student)

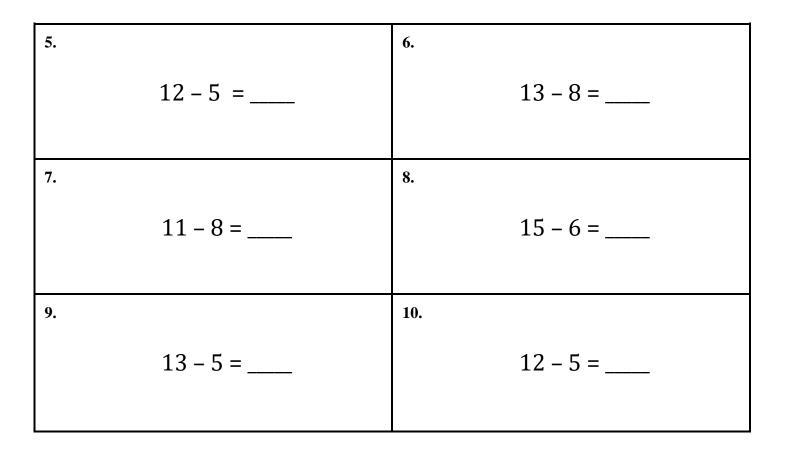
- Say the subtraction problem and write the answer if you know it.
- Use counters, a double 10-frame and Think Add to Subtract cards to find or check your answer.



Session 1: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to add numbers to 20.





Session 1: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form A

Name_____

F

Date____

-

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

14 - 5 =	15 - 7 =
12 - 6 =	16 - 8 =
11 - 3 =	12 - 5 =
13 - 9 =	18 - 9 =
16 - 7 =	13 - 5 =
14 - 7 =	15 - 9 =
12 - 4 =	11 - 7 =
Number Corr	ect =



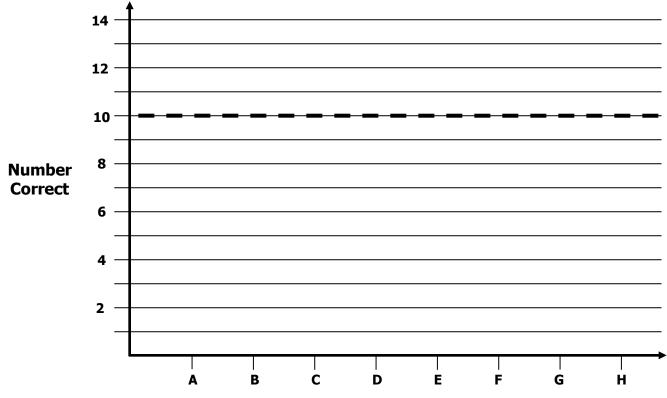
Growth Chart

Name

Date _____

Learning Target: I will subtract numbers within 20.

Goal: 10 out of 14 correct



Quick Check Form

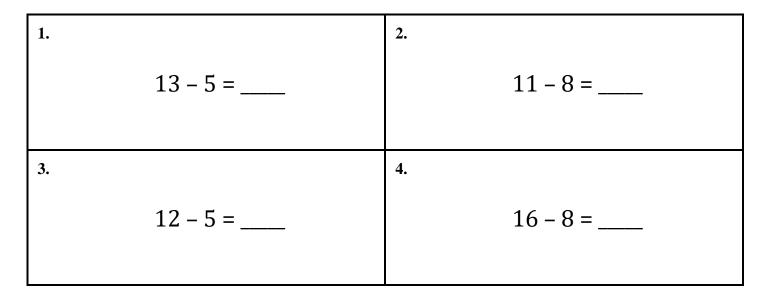
Intervention	Date	Score
Session 1:		
Session 2:		
Session 3:		
Session 4:		
Session 5:		
Session 6:		
Session 7:		
Session 8:		

Session 2: Guided Practice (We Do)

Materials:

- 2-colored counters (20 per student)
- Double 10-frame mat (1 per student)
- Add to Subtract Cards (1 set per student See Session 1)

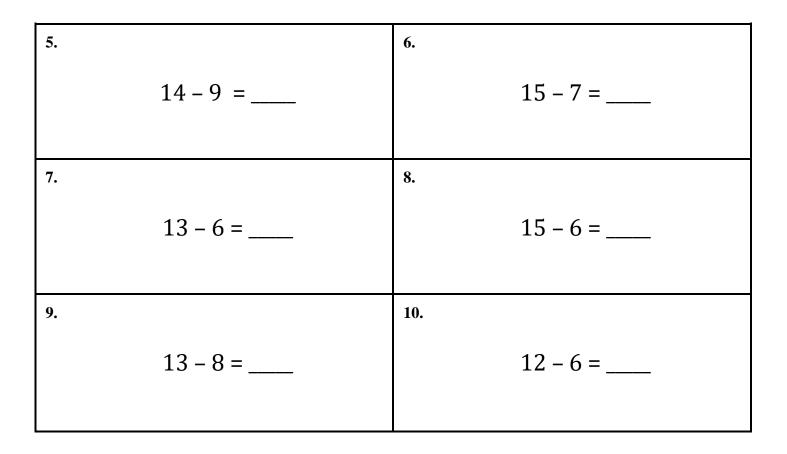
- Say the subtraction problem and write the answer if you know it.
- ▶ Use counters, a double 10-frame and Think Add to Subtract cards to find or check your answer.



Session 2: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to add numbers to 20.





Session 2: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form B

Name_____

F

Date____

-

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

13 - 5 =	14 - 7 =
15 - 6 =	16 - 7 =
11 - 3 =	12 - 9 =
13 - 9 =	18 - 9 =
16 - 8 =	12 - 6 =
15 - 7 =	14 - 5 =
12 - 4 =	11 - 7 =
Number Corr	ect =



Session 3: Modeling (I Do)

Learning Target: I will subtract numbers to 20

Readiness for adding and subtracting 2-digit numbers

12 kangaroos were hopping around in a field. 5 of the kangaroos got tired and went home. How many kangaroos are in the field now?



Readiness for adding and subtracting 2-digit numbers

12 kangaroos were hopping around in a field. 5 of the kangaroos got tired and went home. How many kangaroos are in the field now?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about. This problem is about kangaroos hopping around in a field.						
Second, I need to determine what I need to find. I need to find the number of kangaroos that got tired and went home.						
Third, I need to determine what I know. I know that 12 kangaroos were hopping around in a field and 5 kangaroos go	t tirec	l and	went	home.		
Fourth, I need to figure out what I can try.	-	Fotal	Kanga	roos (1	L2)	
This time, I am going to try modeling the actions with a drawing.	0	0	0	0	0	
I will draw 12 circles to represent the total number of kangaroos.	0	0 4	-	-	-	5 Went Home
(Draw and label 12 circles.)		$\overline{\mathbf{\nabla}}$				
(Draw and label 12 circles.) Next, I will cross out 5 circles to represent the kangaroos that went home. (Draw "subtraction" lines through 5 circles and write the subtraction equation	.)	-	12 –	5 = _7	<u></u>	

I found that 7 kangaroos stayed in the field. It makes sense because I knew that there were 12 total and 5 went home, so I modeled the problem with a math drawing to find the unknown part of 12.

I also know that the two parts added together must equal the total.

Can you see the addition problem, 5 plus 7 equals 12, in the drawing?

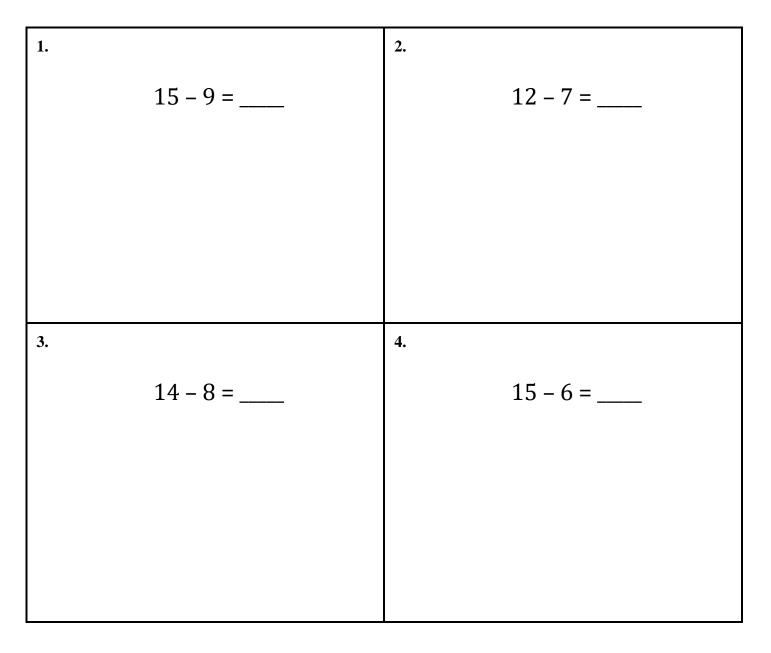
(Write the "Add to Subtract" equation 5 + ____ = 12.)

Anytime I need to subtract, I can think addition...like 5 plus what number equals 12? 7

Readiness for adding and subtracting 2-digit numbers

Session 3: Guided Practice (We Do)

- Say the subtraction problem and write the answer if you know it.
- > Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

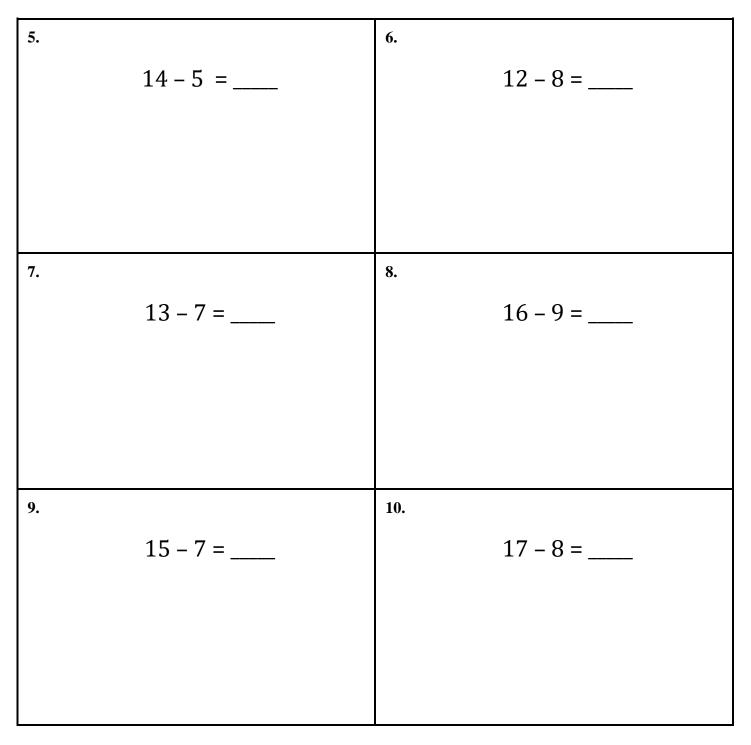


Readiness for adding and subtracting 2-digit numbers

Session 3: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

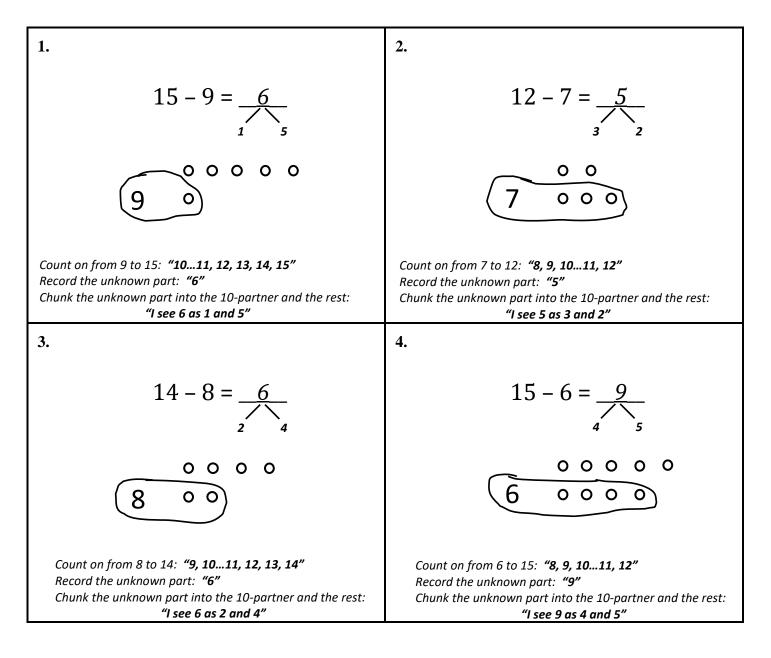
Students take turns leading to subtract numbers within 20.



Readiness for adding and subtracting 2-digit numbers

Session 3: Guided Practice (We Do – Teacher Notes)

- Say the subtraction problem and write the answer if you know it.
- > Use a math drawing and the Think Add to Subtract strategy to find or check your answer.





Session 3: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form C

Name_____

Date____

1

Learning Target: I will subtract numbers within 20.

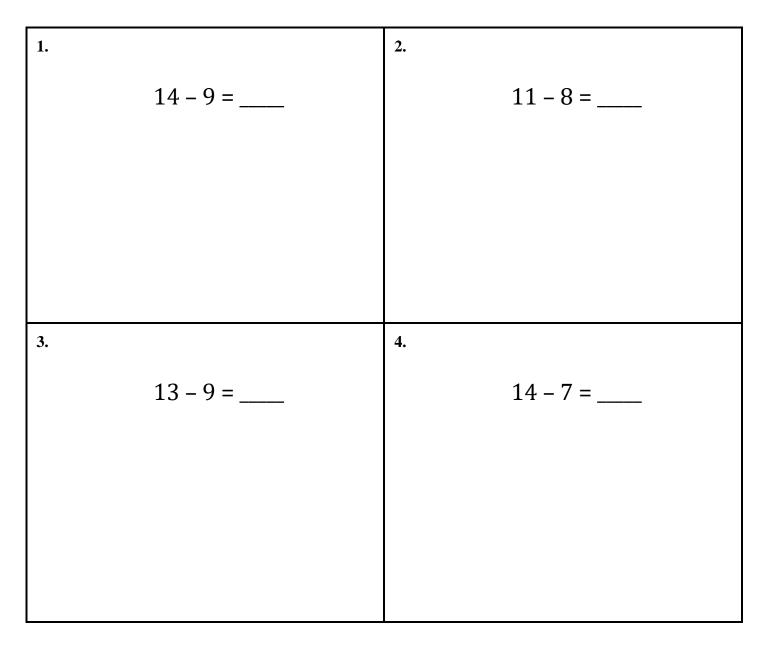
Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

14 - 5 =	13 - 4 =	
15 - 6 =	16 - 8 =	
11 - 3 =	12 - 6 =	
15 - 8 =	18 - 9 =	
16 - 7 =	13 - 9 =	
14 - 7 =	12 - 9 =	
12 - 4 =	11 - 7 =	
Number Correct =		

Readiness for adding and subtracting 2-digit numbers

Session 4: Guided Practice (We Do)

- > Say the subtraction problem and write the answer if you know it.
- > Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

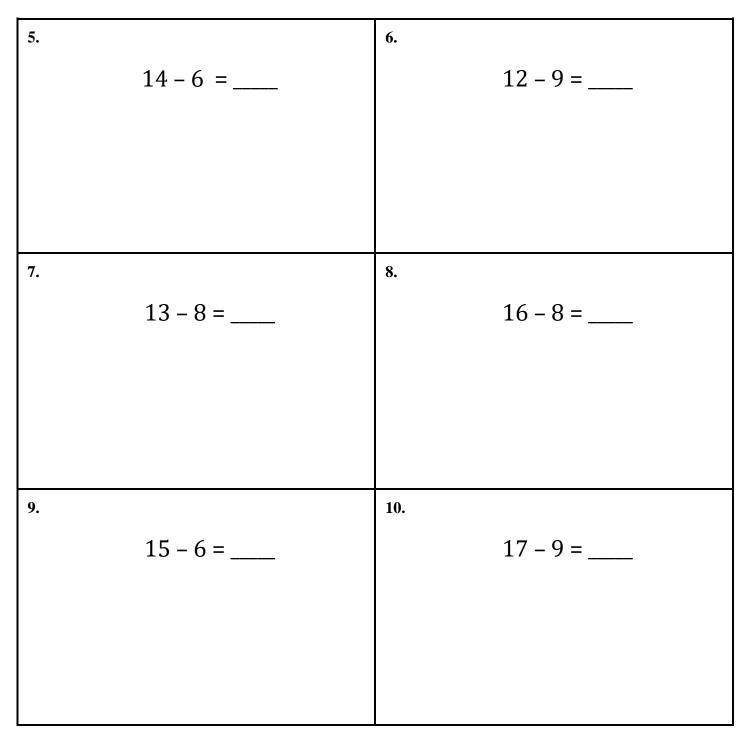


Readiness for adding and subtracting 2-digit numbers

Session 4: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to subtract numbers within 20.





Session 4: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form D

Name_____

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Date____

1

Learning Target: I will subtract numbers within 20.

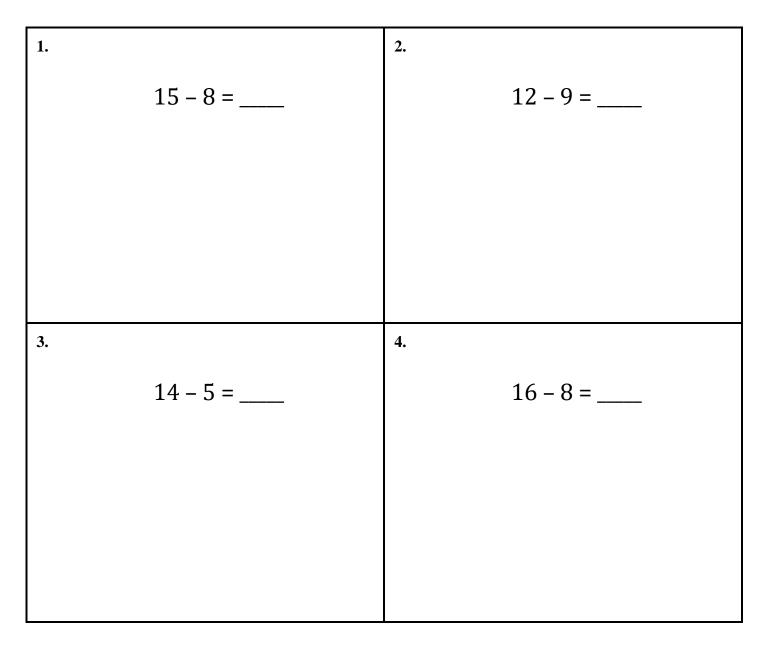
Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

13 - 4 =	18 - 9 =	
15 - 6 =	11 - 5 =	
11 - 3 =	12 - 9 =	
13 - 8 =	14 - 7 =	
11 - 7 =	12 - 6 =	
12 - 4 =	14 - 5 =	
15 - 7 =	16 - 8 =	
Number Correct =		

Readiness for adding and subtracting 2-digit numbers

Session 5: Guided Practice (We Do)

- Say the subtraction problem and write the answer if you know it.
- > Use a math drawing and the Think Add to Subtract strategy to find or check your answer.

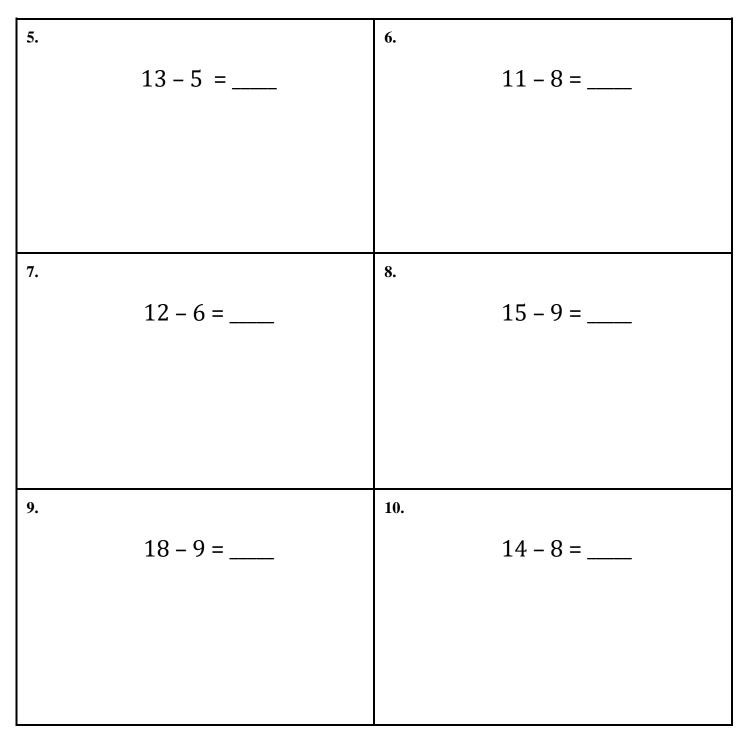


Readiness for adding and subtracting 2-digit numbers

Session 5: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to subtract numbers within 20.





Session 5: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form E

Name_____

Date____

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

14 - 5 =	15 - 7 =	
12 - 6 =	16 - 8 =	
11 - 3 =	12 - 5 =	
13 - 9 =	18 - 9 =	
16 - 7 =	13 - 5 =	
14 - 7 =	15 - 9 =	
12 - 4 =	11 - 7 =	
Number Correct =		



Session 6: Modeling (I Do)

Learning Target: I will subtract numbers to 20

Readiness for adding and subtracting 2-digit numbers

Hector baked cookies for his brother's birthday party. He needs 3 eggs to make 4 dozen cookies. If there were 12 eggs in the refrigerator when he started, how many eggs should be left after he was finished baking 4 dozen cookies?

Session 6: Modeling (I Do - Teacher Notes)

Learning Target: I will subtract numbers to 20

Readiness for adding and subtracting 2-digit numbers

Part

3

12

Unknown Part

2

Hector baked cookies for his brother's birthday party. He needs 3 eggs to make 4 dozen cookies. If there were 12 eggs in the refrigerator when he started, how many eggs should be left after he was finished baking 4 dozen cookies?

I am going to think aloud to model solving this problem.

Your job is to watch, listen, think and ask questions.

First, it is important to know what the problem is about.

This problem is about Hector baking cookies for his brother's birthday party.

Second, I need to determine what I need to find.

I need to find the number of eggs left in the refrigerator after making 4 dozen cookies.

Third, I need to determine what I know.

I know that there were 12 eggs when he started and he needed to use 3 of them.

Fourth, I need to figure out what I can try.

This time, I am going to try modeling the actions using an equation with number bonds.

Since Hector started with 12 eggs and used 3, I will write and label each number. (Write and label Total...12 and Part...3.)

Since we want to know the number of eggs he did not use, a subtraction statement is needed to model this problem...12 minus 3 equals what number? (Write the – and = signs and label the Unknown Part.)

I know that I can always think add to subtract, so I will draw number bonds under the unknown part. (Write two number bonds under the Unknown Part.)

So, 3 plus what number equals 12.

The first bond will be the number that makes 10 with the 3...7 plus 3 is 10. (Write a 7 under the first number bond and circle the ten.)

And, 2 more is 12. (Write a 2 under the second number bond.) Since 7 + 2 = 9...9 is the other part of 12...so 12 – 3 = 9.

(Write 9 as the answer.)

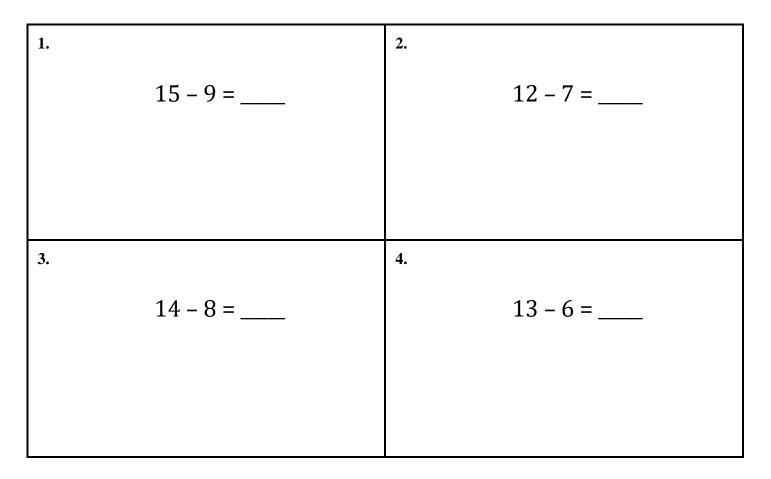
Last, I need to make sure that my answer makes sense.

I found that there should be 9 eggs left. It makes sense because I knew Hector began with a total of 12 eggs and used 3 of them. So, I modeled the problem with a subtraction equation and used number bonds to help me find the unknown part by adding to ten then the rest.

Readiness for adding and subtracting 2-digit numbers

Session 6: Guided Practice (We Do)

- Say the subtraction problem and write the answer if you know it.
- > Use number bonds and the Think Add to Subtract strategy to find or check your answer.

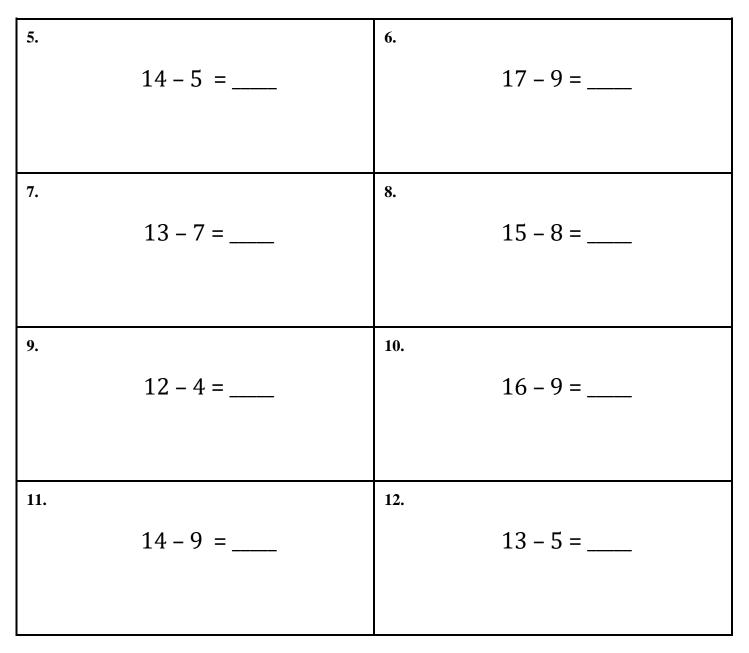


Readiness for adding and subtracting 2-digit numbers

Session 6: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to subtract numbers within 20.

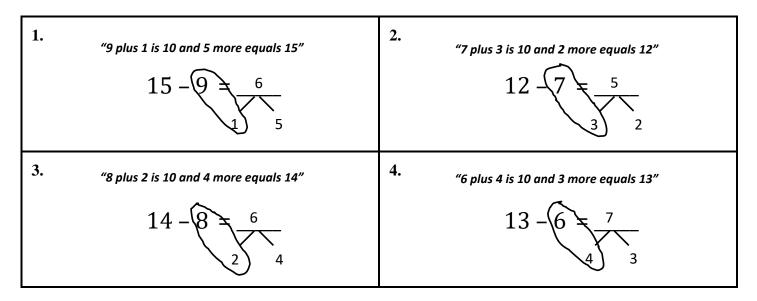


Readiness for adding and subtracting 2-digit numbers

Session 6: Guided Practice (We Do - Teacher Notes)

We Do Together: (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- > Use number bonds and the Think Add to Subtract strategy to find or check your answer.





Session 6: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form F

Name_____

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Date____

1

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

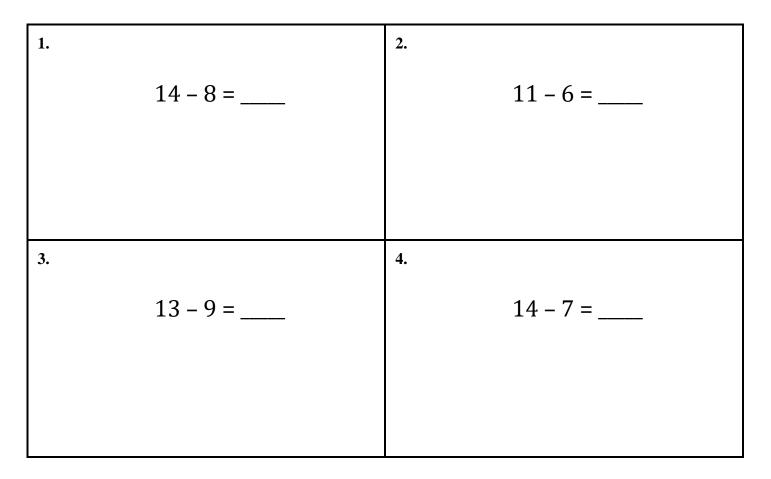
13 - 5 =	14 - 7 =	
15 - 6 =	16 - 7 =	
11 - 3 =	12 - 9 =	
13 - 9 =	18 - 9 =	
16 - 8 =	12 - 6 =	
15 - 7 =	14 - 5 =	
12 - 4 =	11 - 7 =	
Number Correct =		

Readiness for adding and subtracting 2-digit numbers

Session 7: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- Say the subtraction problem and write the answer if you know it.
- > Use number bonds and the Think Add to Subtract strategy to find or check your answer.

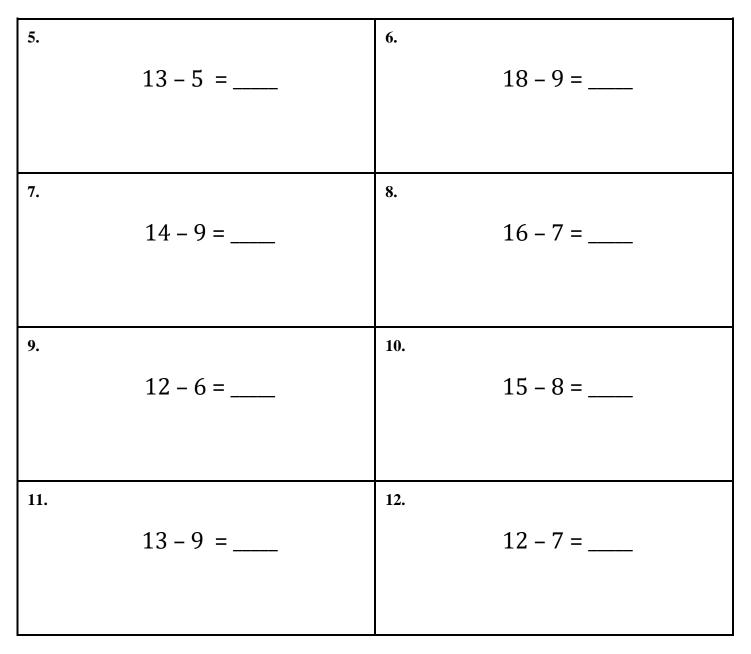


Readiness for adding and subtracting 2-digit numbers

Session 7: Guided Practice (We Do - Continued)

You Do Together: (As a class, or in small groups)

Students take turns leading to subtract numbers within 20.





Session 7: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form G

Name_____

Date_____

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

14 - 5 =	13 - 4 =	
15 - 6 =	16 - 8 =	
11 - 3 =	12 - 6 =	
15 - 8 =	18 - 9 =	
16 - 7 =	13 - 9 =	
14 - 7 =	12 - 9 =	
12 - 4 =	11 - 7 =	
Number Correct =		

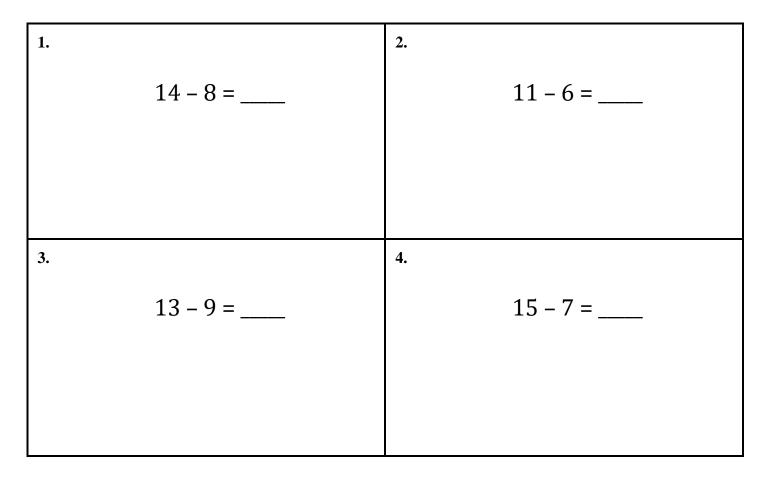
1

Readiness for adding and subtracting 2-digit numbers

Session 8: Guided Practice (We Do)

We Do Together: (Teacher Actions)

- > Say the subtraction problem and write the answer if you know it.
- > Use number bonds and the Think Add to Subtract strategy to find or check your answer.





Session 8: Self-Reflection

Learning Target: I will subtract numbers to 20

Briefly discuss student responses:

What did I learn today about subtracting numbers to 20?

How confident do I feel about subtracting numbers to 20 on my own? (Thumbs up, down, or sideways)



Quick Check - Form H

Name_____

F

Date____

-

Learning Target: I will subtract numbers within 20.

Directions: When you are told to begin, answer as many subtraction problems as you can. (Work Time: 1 minute)

13 - 4 =	18 - 9 =	
15 - 6 =	11 - 5 =	
11 - 3 =	12 - 9 =	
13 - 8 =	14 - 7 =	
11 - 7 =	12 - 6 =	
12 - 4 =	14 - 5 =	
15 - 7 =	16 - 8 =	
Number Correct =		



Independent Practice (You Do)

Learning Target: I will subtract numbers within 20

Title of Game: "Whose Difference is Greater?"

Number of Players: 2

Objective: To be the player with the most cards at the end of the game.

Materials:

- Subtraction Problem Cards
 - o Player 1 gets set A
 - o Player 2 gets Set B

Directions:

- > Each player shuffles their cards and places them face down in a pile.
- > Player 1: Flip over the top card, say the problem and the "think add to subtract" equation to find the answer.

Example for 12 - 8: "Since 8 + 4 = 12, then 12 - 8 = 4"

or "8 plus what is 12...8 + 2 is 10 and 2 more is 12...4"

> Player 2: Flip over the top card, say the problem and the "think add to subtract" equation to find the answer.

or

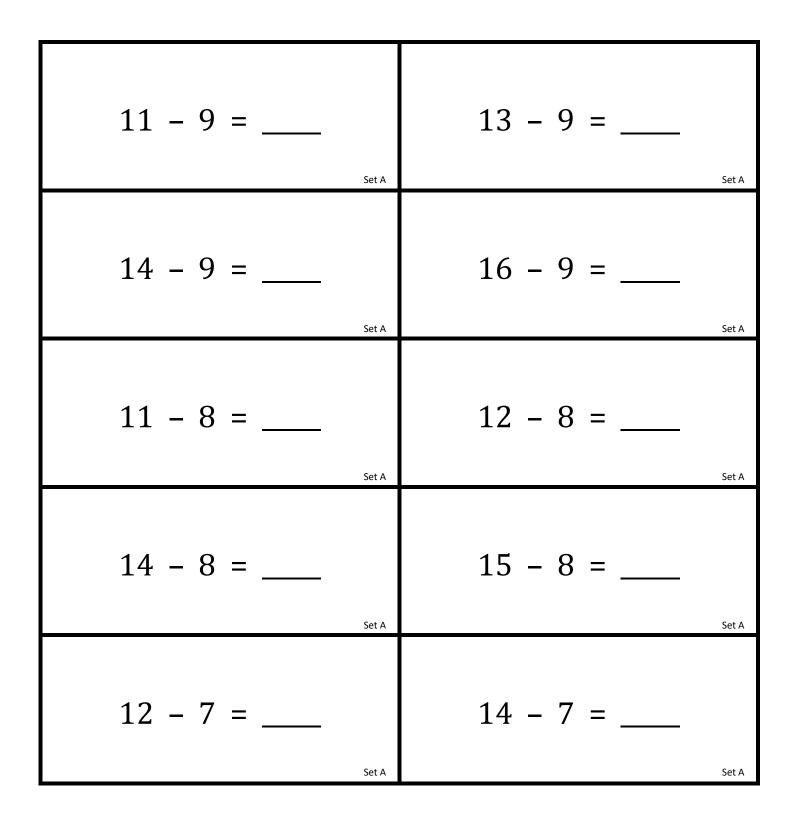
"9 plus what is 14...9 + 1 is 10 and 4 more is 14...5"

- > The player with the greater difference takes both cards
- Repeat until all cards have been played

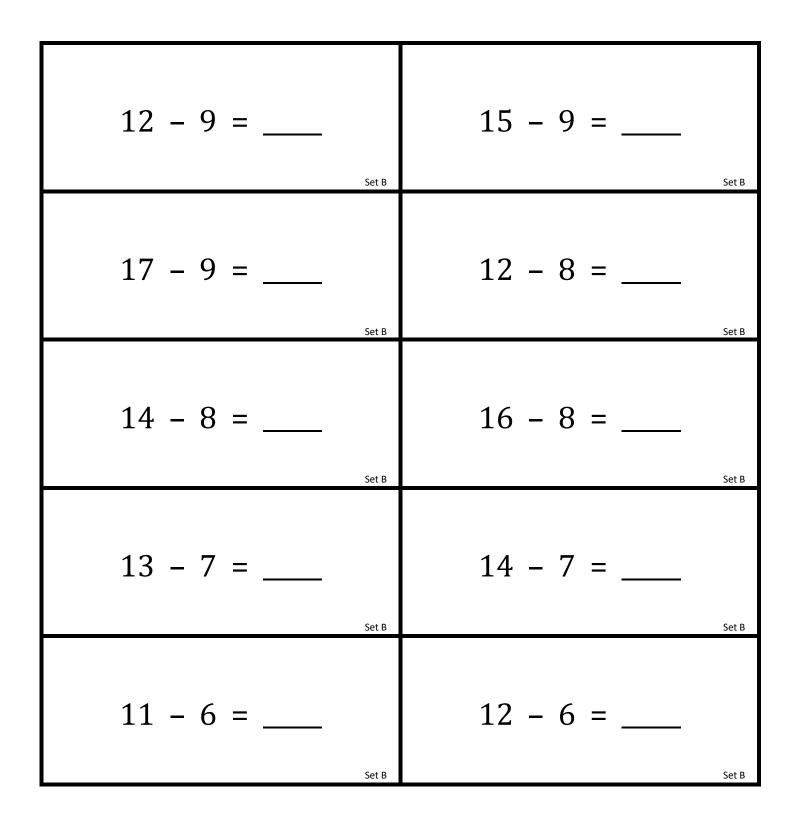
Decide the Winner:

- > At the end of the game, the teacher flips a coin
 - If the coin lands **heads up**, the winner is the player with the **greater** number of cards
 - \circ $\;$ If the coin lands tails up, the winner is the player with the lesser number of cards

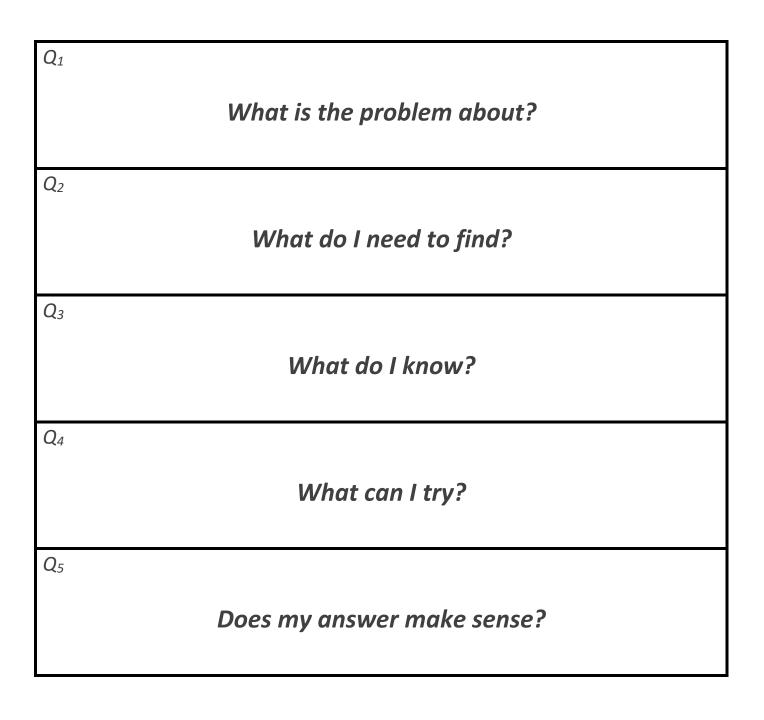














*Q*₁. What is the problem about?

 Q_2 . What do I need to find?

Q₃. What do I know?

*Q*₄. What can I try?

*Q*₅. Does my answer make sense?