PROBLEM MAKING SENSE OF MATHEMATICS

Difficult Addition Facts

Extend Your Learning Answers and Explanations

Solve the following problems by using doubles or using ten. Explain your reasoning.

1. The Panthers gained 8 yards on the first down and 6 yards on the second down. How many yards did they gain in two plays?

To solve this problem, add 8 + 6. Here are three possible strategies.

Use Doubles: 8 + 8 = 16, 8 + 6 is two less, so 8 + 6 = 14. **Use Doubles:** 6 + 6 = 12, 8 + 6 is two more, so 8 + 6 = 14.

Use Doubles: Subtract 1 from 8 and add 1 to 6. The result is 7 + 7, or 14.

Use Ten: 8 + 2 = 10, 10 + 4 = 14

2. George and Jared raked leaves for one hour. George earned \$5 more than Jared. Jared earned \$9. How much did George earn?

To solve this problem, add 9 + 5. Here is one possible strategy.

Use Ten: 9 + 1 = 10, 10 + 4 = 14

3. Samantha jogged 6 miles on Saturday and 7 miles on Sunday. How many miles did she jog over the weekend?

To solve this problem, add 6 + 7. Here are two possible strategies.

Use Doubles: 6 + 6 = 12, 6 + 7 is one more, so 6 + 7 = 13. **Use Doubles:** 7 + 7 = 14, 6 + 7 is one less, so 6 + 7 = 13.

4. Dillon bought apples at the orchard. He gave 5 to his aunt and kept 8 for his family. How many apples did he buy?

To solve this problem, add 5 + 8. Here is one possible strategy.

Use Ten: 8 + 2 = 10, 10 + 3 = 13

5. Max has 9 dollars more than Dexter. Dexter has 8 dollars. How much money does Max have?

To solve this problem, add 8 + 9. Here are three possible strategies.

Use Doubles: 8 + 8 = 16, 8 + 9 is one more, so 8 + 9 = 17. **Use Doubles:** 9 + 9 = 18, 8 + 9 is one less, so 8 + 9 = 17. **Use Ten:** 9 + 1 = 10, 10 + 7 = 17

6. The Miller family visited Custer State Park. They saw 7 fewer wild donkeys than buffalo. They saw 9 wild donkeys. How many buffalo did they see?

To solve this problem, add 7 + 9. Here are three possible strategies.

Use Doubles: 7 + 7 = 14, 7 + 9 is two more, so 7 + 9 = 16. **Use Doubles:** 9 + 9 = 18, 7 + 9 is two less, so 7 + 9 = 16. **Use Ten:** 9 + 1 = 10, 10 + 6 = 16



PROBLEM MAKING SENSE OF MATHEMATICS

Difficult Addition Facts

Extend Your Learning Answers and Explanations

7. Lois woke up at 6:00 AM on Friday. She woke up 5 hours later on Saturday. What time did she get up on Saturday?

To solve this problem, add 6 + 5. Here are two possible strategies.

Use Doubles: 6 + 6 = 12, 6 + 5 is one less, so 6 + 5 = 11. **Use Doubles:** 5 + 5 = 10, 6 + 5 is one more, so 6 + 5 = 11.

8. On Friday, Jay spends 7 hours in school and 5 hours after school at a friend's house. How many hours is he away from home?

To solve this problem, add 7 + 5. Here are two possible strategies.

Use Doubles: 7 + 7 = 14, 7 + 5 is two less, so 7 + 5 = 12. **Use Doubles:** 5 + 5 = 10, 7 + 5 is two more, so 7 + 5 = 12.

9. Kevin has 8 quarters and 7 dimes in his pocket. How many coins are in his pocket? To solve this problem, add 8 + 7. Here are three possible strategies.

Use Doubles: 7 + 7 = 14, 8 + 7 is one more, so 8 + 7 = 15. **Use Doubles:** 8 + 8 = 16, 8 + 7 is one less, so 8 + 7 = 15. **Use Ten:** 8 + 2 = 10, 10 + 5 = 15

10. Jordan earned some money babysitting. If she spent \$6 and saved \$9, how much did she earn?

To solve this problem, add 6 + 9. Here is one possible strategy. Use Ten: 9 + 1 = 10, 10 + 5 = 15

Solve the following problems mentally. Write your answer in the first column and describe your thinking in the second column. Use doubles or multiples of ten to help. The first problem is done for you.

	35 + 37 = 72	35 + 35 = 70. Since 37 is two more than 35 , $35 + 37$ is two more than 70.
11.	15 + 17 = 32	15 + 15 = 30. Since 17 is two more than 15, $15 + 17$ is two more than 30.
12.	99 + 34 = 133	Take one from 34 and add it to 99 to get 100. Now add the remaining 33. $100 + 33 = 133$.
13.	25 + 26 = 51	25 + 25 = 50. Since 26 is one more than 25, $25 + 26$ is one more than 50, or 51.
14.	98 + 26 = 124	Take two from 26 and add it to 98 to get 100. Now add the remaining 24. $100 + 24 = 124$.
15.	69 + 16 = 85	Take one from 16 and add it to 69 to get 70. Now add the remaining 15. $70 + 15 = 85$.
16.	28 + 25 = 53	25 + 25 = 50. Since 28 is three more than 25 , $25 + 28$ is three more than 50, or 53.

