

21 Guess and Check



Pairs

Start

"Guess and Check" is a strategy for solving problems. First, make a reasonable guess. Then check the answer. Then make more guesses, if necessary. Use the "Guess and Check" strategy to solve this problem with your partner. Take turns guessing and checking. The first guess is done for you.

The product of two numbers is 3.75. Their sum is 8.

Copy the table.

First Guess: 6.5 and 1.5	Second Guess: _____ and _____	Third Guess: _____ and _____
Product: 9.75	Product:	Product:
Sum: 8	Sum:	Sum:
Check: Is the product 3.75? <i>no</i> Is the sum 8? <i>yes</i>	Check: Is the product 3.75? Is the sum 8?	Check: Is the product 3.75? Is the sum 8?

Add more boxes if you need them. Remember to try and start with a reasonable guess. Why is the first guess in the box reasonable?

Now solve these problems using the "Guess and Check" strategy.

1. The product of two numbers is 5.25. Their sum is 4.75.
2. The product of two numbers is 8.25. Their sum is 7.

Solve these problems by drawing a table and using the "Guess and Check" strategy.

3. Mara buys a wallet and a pin. She spends \$23.35. The pin is more expensive than the wallet. One item cost \$0.75 more than the other. How much does Mara pay for the wallet and for the pin?
4. Evan gave his two brothers a total of \$16.25. Tim got \$1.25 more than Peter. How much did each brother get?

Analyze How did you find a reasonable response for your first guess in the two problems above?