

Problem-Solving Investigation: Guess and Check

MAIN IDEA

- Solve problems by using the guess and check strategy.

EXAMPLE

Hal is younger than Randi. Each of their ages is a different prime number. The total of their ages is 91. How old are Hal and Randi?

UNDERSTAND You know that is younger than . Each of their ages is a different number, and the total of their ages is . You need to find what their ages are.

PLAN Make a guess until you find an answer that makes sense for the problem.

SOLVE

Hal	Prime Number?	Randi	Prime Number?	Total (Hal + Randi)
11	yes	80	<input type="text"/>	91
7	<input type="text"/>	84	no	91
5	yes	<input type="text"/>	no	91
2	yes	89	yes	<input type="text"/>

So, Hal is years old, and Randi is years old.

CHECK Hal's age is less than Randi's age. Both 2 and 89 are prime numbers, and $2 + 89 = 91$. So, the answer is correct.

HOMEWORK ASSIGNMENT

Page(s):

Exercises:

Check Your Progress

MONEY Leah has 5 bills and 3 coins in her pocket. If she has a total of \$27.31 in her pocket, what kinds of bills and coins does she have?