

MY Homework

Lesson 6

Problem Solving: Guess, Check, and Revise

Homework Helper



Need help? connectED.mcgraw-hill.com

Cassandra and Shawnel are the same age. Tonya is 3 years older than Cassandra. If you add all their ages together, the sum is 39. What is the age of each girl?

1 Understand

What facts do you know?

- Cassandra and Shawnel are the same age.
- Tonya is 3 years older than Cassandra.
- The sum of their ages is 39.

What do you need to find?

- Find the ages of each girl.

2 Plan

Guess, check, and revise to solve the problem.

3 Solve

Make a guess, then check. Use what you find to revise.

| Cassandra's Age | Shawnel's Age | Tonya's Age | Sum of Ages | Check |
|-----------------|---------------|-------------|-------------|----------|
| 10 | 10 | 13 | 33 | too low |
| 15 | 15 | 18 | 48 | too high |
| 12 | 12 | 15 | 39 | correct |

So, Cassandra and Shawnel are each 12 years old and Tonya is 15 years old.

4 Check

Is my answer reasonable? Explain.

Add their ages to check. $12 + 12 + 15 = 39$



Problem Solving

Mathematical PRACTICE 1

Make a Plan Guess, check, and revise to solve each problem.

1. Mei bought two items. She spent exactly 93¢. What did she buy?

eraser, ruler

| School Supplies | Cost (¢) |
|-----------------|----------|
| eraser | 32 |
| pencil | 15 |
| pen | 20 |
| ruler | 61 |

2. A house has 3 windows that are polygons with a total of 13 sides. Two of the windows are the same shape. The third window has one more side than the first two windows. What specific shapes are the windows?

2 quadrilaterals and 1 pentagon

3. There are 20 crayons in a bag. The crayons are red, yellow, and blue. The number of red crayons is the same as the number of yellow crayons. There are twice as many blue crayons as yellow crayons. How many of each color are there?

5 red, 5 yellow, 10 blue crayons

4. Dolores bought some new pillows. She bought twice as many green pillows as blue pillows, and 1 less red pillow than green pillows. She bought a total of 9 pillows. How many pillows of each color did she buy?

2 blue, 4 green, 3 red pillows

5. Andrew has a combination of 8 quarters, dimes, and nickels that add up to a value of 95¢. How many of each coin does Andrew have?

2 quarters, 3 dimes, 3 nickels