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Solving Multi-Step Addition and Subtraction Word Problems

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Let's review our addition and subtraction action words!

Addition	Subtraction
Sum	Less than
Plus	More than
And	Decrease
Total	Difference
Both	Remain
Combined	Minus
Altogether	

Let's practice identifying our "unknown"!

Example:

A number minus seven equals one.

What part of that sentence don't we know?

"A number"

Let's say "A number" = X

Okay, now let's write out our equation:

$$**X - 7 = 1**$$

Let's practice identifying our "unknown"!

Example 2:

Nine minus one equals a number.

What part of that sentence don't we know?

"a number"

Let's say "A number" = N

Okay, now let's write out our equation:

$$9 - 1 = N$$

Let's practice identifying our "unknown"!

Example 3:

How would you solve that equation?

Add 10 to 100 So, $B = 100 + 10$

$$**B = 110**$$

Let's practice identifying our "unknown"!

Example 3:

Ten plus a number equals ninety

What part of that sentence don't we know?

How would you solve that equation?

Subtract 10 from 90 So, $C = 90 - 10$

$$C = 80$$

Multi- Step Word Problem

1. Bryon decorated 54 chocolate sprinkle donuts at the bakery with his grandfather. He decorated 75 sugar cookies. Then he decorates 89 vanilla cupcakes. How many delicious treats did Bryon decorate altogether for the bakery?

The problem is asking you to solve for the total amount of treats Bryon decorated!

What should

T for treats

sentence.

$$54 + 75 + 89 = T$$

Answer

T = 228 treats total!

How did you solve the problem?

I added the total donuts and sugar cookies first, and then I added that total to the total number of cupcakes to find the total number of ALL the treats he decorated.

Round each number to the nearest ten and solve.

54 rounds down to 50

75 rounds up to 80

89 rounds up to 90

Add them!

$$50 + 80 = 130$$

$$130 + 90 = 220$$

Is your answer reasonable?

Yes! Our rounded total was only 8 off of our exact total!

Multi- Step Word Problem

2. Caitlin and Kyle are putting two puzzles together. Caitlin's puzzle has 462 pieces to put it together. Kyle's puzzle has 1635 puzzle pieces to complete it. They are missing 231 pieces to both of those puzzles. How many pieces do they have altogether?

The total amount puzzle pieces Caitlin and Kyle actually have.

What should

P for puzzle pieces

sentence.

$$462 + 1635 - 231 = P$$

Answer

P = 1866 treats total!

I added the total number of puzzle pieces they were supposed to have first, and then I subtracted the number of puzzle pieces they were missing to find how many they actually have left.

Round each number to the nearest ten and solve.

462 rounds down to 460

1635 rounds up to 1640

231 rounds down to 230

Solve!

$$460 + 1640 = 2100$$

$$2100 - 230 = 1870$$

Is your answer reasonable?

Yes! Our rounded total was only 8 off of our exact total!