

OBJECTIVE 3: Solving Problems About Numbers

STEPS:

1. Change the words into variables, operations, and numbers (the operation replaces the word and)
 - a. +: sum, add, plus, addition
 - b. -: subtract, difference, minus
 - c. ·: product, of, multiply, times
 - d. ÷: quotient, divide, per
2. Simplify or solve the expression or equation
3. Check your answer if it was an equation

TASK 1: Finding an Unknown Number

a) The quotient of a number and 6, minus $\frac{5}{3}$, is the quotient of the number and 2. Find the number.

$$\frac{x \cdot (1)}{6} - \frac{5 \cdot (2)}{3} = \frac{x \cdot (3)}{2}$$

LCD: 6

$$x - 10 = 3x$$

$$-10 = 2x$$

x = -5

$$-\frac{5}{6} - \frac{5}{3} = -2.5$$

$$-\frac{5}{2} = -2.5$$

b) The quotient of a number and 5, minus $\frac{3}{2}$, is the quotient of the number and 10. Find the number.

$$\frac{x \cdot (2)}{5} - \frac{3 \cdot (5)}{2} = \frac{x \cdot (1)}{10}$$

LCD: 10

$$2x - 15 = x$$

$$-15 = -x$$

15 = x

$$\frac{15}{5} - \frac{3}{2} = 1.5$$

$$\frac{15}{10} = 1.5$$

Common Mistakes:

answer [STO] [X,T,θ,n] then check answer on the calculator.

Still need help with: