

Chapter 4 Writing Equations

Writing Equations from Word Problems:

1. Read phrase/problem carefully.
2. Identify key words/operations and values/variables. ←
3. Define variables {let $x =$ _____}
4. Translate into an equation.
5. Solve.
6. Verify to see if answer makes sense.
7. Answer word problems in a complete sentence including correct units.

Key words:

- more than
- less than
- twice
- divided into
- is
- of

Ex. 1: Translate each sentence into a one-step equation. Solve and check your answer.

A. The sum of a number and twelve is -15.

B. 35 is the difference of 25 and a number is.

C. The quotient of a number and negative five is -12.

D. Five less than a number is 20.

E. Ten is 6 fewer than a number.

F. Forty two is the product of a number and negative 6.

Ex. 2: Translate each sentence into a two-step equation. Solve and check your answer.

A. Two times the sum of a number and five is 36.

B. The quotient of a number and six, increased by eleven is negative nine.

C. Five more than twice a number n is -25.