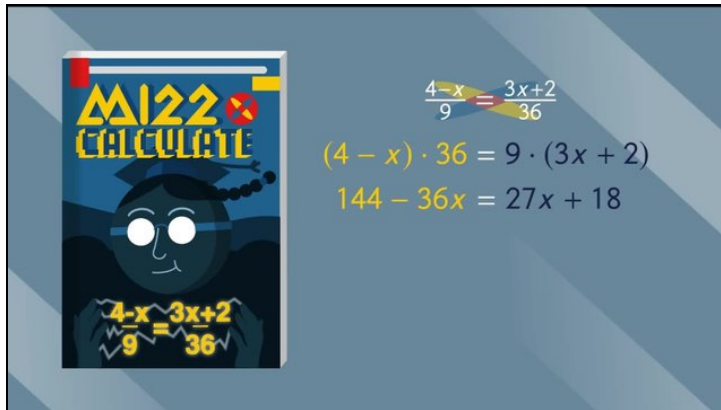




Printable Worksheets from [sofatutor.com](https://www.sofatutor.com)

Linear Equations in Disguise



- 1 Review the steps for solving linear equations in disguise.
- 2 Identify the steps for solving the linear equation in disguise.
- 3 Solve the linear equations in disguise.
- 4 Distinguish the linear equations from non-linear equations.
- 5 Identify the linear equation which represents the given scenario.
- 6 Determine which equations are linear.
- + with lots of tips, answer keys, and detailed answer explanations for all of the problems.



The complete package, including all problems, hints, answers, and detailed answer explanations is available for all [sofatutor.com](https://www.sofatutor.com) subscribers.



Review the steps for solving linear equations in disguise.

Match the steps with the correct name for each step.

$$\frac{2x+5}{4} = \frac{3-x}{2}$$

A

1 distribution

$$2(2x + 5) = 4(3 - x)$$

B

2 reducing the fraction

$$4x + 10 = 12 - 4x$$

C

3 combining like terms

$$8x = 2$$

D

4 cross-multiplication

$$x = \frac{2}{8}$$

E

5 original equation

$$x = \frac{1}{4}$$

F

6 division



Hints for solving these problems

1
of 6

Review the steps for solving linear equations in disguise.

Hint #1

Here is an example of solving a linear equation in disguise, with the steps indicated:

$\frac{x+1}{3} = \frac{5-x}{4}$	
$4(x+1) = 3(5-x)$	cross-multiplication
$4x+4 = 15-3x$	distribution
$7x = 11$	combining like terms
$x = \frac{11}{7}$	division
$x = 1\frac{4}{7}$	converting to mixed number



Answers and detailed answer explanations for these problems

1
of 6

Review the steps for solving linear equations in disguise.

Answer key: A—5 // B—4 // C—1 // D—3 // E—6 // F—2

$$\frac{2x+5}{4} = \frac{3-x}{2}$$

$$2(2x + 5) = 4(3 - x) \quad \text{cross-multiplication}$$

$$4x + 10 = 12 - 4x \quad \text{distribution}$$

$$8x = 2 \quad \text{combining like terms}$$

$$x = \frac{2}{8} \quad \text{division}$$

$$x = \frac{1}{4} \quad \text{reducing fraction}$$