LESSON MAKER PRO

Find the Missing Amount

Write and solve one-step equations.

GRADE 6 · 6.EE.7

6.EE.7 "Write and solve real-world and mathematical problems in the form of one-step, linear equations involving non negative rational numbers."

NAME _____ DATE _____

UNDO THE OPERATION

Use x for an unknown amount. To solve a one-step equation, undo the operation on x by doing the same thing to both sides.

WORKED EXAMPLE

Solve x + 0.6 = 1.4.

1. Subtract 0.6 from both sides: x + 0.6 - 0.6 = 1.4 - 0.6.
2. Simplify: x = 0.8.

Answer: x = 0.8

PRACTICE 6 problems

1 Solve for x: x + 2/3 = 5/3.

ANSWER _____

2 Solve for x: x - 5/8 = 1/8.

ANSWER _____

3 Solve for x: 6x = 5.

ANSWER _____

4 Solve for x: x/4 = 3/10.

ANSWER _____

5 Solve for x: x + 0.35 = 1.2.

ANSWER _____

6 Solve for x: 0.4x = 1.8.

ANSWER _____

APPLY IT Show your work

1 A game costs $12.75. You have saved $8.50. Let x be the number of dollars you still need. Write an equation and solve for x.

WORK SPACE

ANSWER _____

2 You use 2 1/4 meters of cord to make 3 identical friendship bracelets. Let x be the meters of cord used for each bracelet. Write an equation and solve for x.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A student solves (3/4)x = 9/8 by subtracting 3/4 from 9/8 and getting x = 3/8. Explain the mistake and find the correct value of x. Show an equation step.

WORK SPACE AND ANSWER

ANSWER KEY

Find the Missing Amount

GRADE 6 · 6.EE.7

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Solve for x: x + 2/3 = 5/3.	**x = 1**
2	Solve for x: x - 5/8 = 1/8.	**x = 3/4**
3	Solve for x: 6x = 5.	**x = 5/6**
4	Solve for x: x/4 = 3/10.	**x = 6/5**
5	Solve for x: x + 0.35 = 1.2.	**x = 0.85**
6	Solve for x: 0.4x = 1.8.	**x = 4.5**

PART 2 · APPLY IT

1. **8.50 + x = 12.75; x = 4.25 dollars** Subtract 8.50 from both sides to find the amount still needed.
2. **3x = 2 1/4; x = 3/4 meter** Divide 2 1/4 by 3 to find the cord used for one bracelet.

CHALLENGE

The student subtracted, but 3/4 is multiplied by x, so divide by 3/4 instead. x = (9/8) / (3/4) = 3/2.

Accept equivalent fractions or decimals and equivalent equations for the word problems. For the challenge, the explanation must identify division as the inverse of multiplication.