

MY Homework

Lesson 8

Solve Two-Step Word Problems

Homework Helper



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Talia picked 8 quarts of strawberries. She picked half as many quarts of blueberries, then bought 1 more quart of blueberries. How many quarts of blueberries does Talia have?

Write an equation with a letter for the unknown. Then solve.

strawberries picked		blueberries picked		+	blueberries bought		=	q	←	unknown
8	÷	2			1					
↙		↘								
4					1					
					+				= 5	

So, $8 \div 2 + 1 = 5$. The unknown is 5. Talia has 5 quarts of blueberries.

Check Use mental math to check your answer for reasonableness.

Subtract the one quart Talia bought from the total.

$$5 - 1 = 4 \text{ and } 4 \text{ is half of } 8.$$

The numbers make sense for the problem. The answer is reasonable.

Practice

Algebra Find each unknown.

1. $48 \div 6 + m = 11$

$m = \underline{3}$

2. $37 - 9 = h \times 4$

$h = \underline{7}$

3. $20 + 20 = 4 \times w$

$w = \underline{10}$

4. $(4 + 2) \times r = 54$

$r = \underline{9}$



Problem Solving Sample equations: 5–8

Mathematical
PRACTICE



Check for Reasonableness Write an equation with a letter for the unknown. Then solve. Check for reasonableness.

5. The football team had its photo taken. There are 3 rows of 8 players each. The fourth row has 6 players. How many players are in the team photo?

$$3 \times 8 + 6 = p; 3 \times 8 + 6 = 30 \text{ players}$$

6. Mrs. Dove made 15 pancakes. She divided them evenly among Kurt, Joan, and David. Kurt and Joan ate all of their pancakes, but David did not eat some of his. There were 2 pancakes left on David's plate. How many pancakes did he eat?

$$15 \div 3 - x = 2; 15 \div 3 - 3 = 2; \text{David ate 3 pancakes.}$$

7. Keira has 83 spelling words to study in 8 weeks. She already knows 3 words. She will study the same number of words each week. How many spelling words will Keira study each week?

$$(83 - 3) \div 8 = s; (83 - 3) \div 8 = 10 \text{ spelling words}$$

8. Grant bought 6 packs of stickers for \$2 each. How much change will Grant receive if he pays with three \$5 bills?

$$(3 \times \$5) - (6 \times \$2) = c; \$15 - \$12 = \$3 \text{ change}$$

Test Practice

9. Isaac has taken five quizzes. He scored 8 points on each of the first 4 quizzes. He scored y points on the fifth quiz. He has scored a total of 41 points. Which equation represents the situation?

(A) $41 \div 5 = y$

(C) $4 \times 8 + y = 41$

(B) $8 \times 4 \div 5 = y$

(D) $41 \div 4 + y = 8$