LESSON MAKER PRO

Two-Step Stories

Write an equation, solve, and check.

GRADE 3 · 3.OA.D.8

3.OA.D.8 "Determine and justify solutions for two-step word problems using the four operations and write an equation with a letter standing for the unknown quantity. Determine reasonableness of answers using number sense, context..."

NAME _____ DATE _____

PLAN TWO STEPS

Find what you need to do first, then write an equation with ___ for the amount you do not know. After you solve it, use mental math or an estimate to check whether your answer fits the story.

WORKED EXAMPLE

There are 11 packs with 5 cards in each pack. You give away 13 cards. How many cards are left?

1. Write the equation: 11 * 5 - 13 = ___.
2. Find the total first: 11 * 5 = 55.
3. Subtract the cards given away: 55 - 13 = 42.
4. Check: 55 - 10 = 45, so 42 is a sensible answer.

Answer: 42 cards

PRACTICE 6 problems

1 There are 3 bags with 12 marbles in each bag. You give away 10 marbles. How many are left? Write an equation with ___ and solve.

ANSWER _____

2 Share 24 markers equally among 4 cups. Then put 2 more markers in each cup. Complete (24 / 4) + 2 = ___ to find how many markers are in each cup.

ANSWER _____

3 A shelf has 18 books. You add 3 stacks of 4 books each. How many books are on the shelf now? Write an equation with ___ and solve.

ANSWER _____

4 A box has 32 crayons. You take out 16 broken crayons, then share the rest equally between 2 tables. Complete (32 - 16) / 2 = ___ to find how many crayons go on each table.

ANSWER _____

5 Each of 4 groups collects 15 trading cards. They share all the cards equally among 6 players. How many cards does each player get? Write an equation with ___ and solve.

ANSWER _____

6 There are 14 red and 22 blue game pieces. Share them equally among 3 teams. How many pieces does each team get? Write an equation with ___ and solve.

ANSWER _____

APPLY IT Show your work

1 At an arcade, 6 friends each earn 14 tickets. They spend 19 tickets in all on a prize. How many tickets do they have left? Write an equation with ___, solve, and use an estimate to check.

WORK SPACE

ANSWER _____

2 For a class snack, students pack 28 orange slices and 20 apple slices equally into 4 boxes. How many slices go in each box? Write an equation with ___, solve, and check by multiplying.

WORK SPACE

ANSWER _____

CHALLENGE One step up

A store has 3 shelves with 16 puzzle books on each shelf. The store sells 4 books in all. Sam writes 3 * (16 - 4) = ___ and gets 36. Write the correct equation with ___, find how many books are left, and explain Sam's mistake. Give a quick check that your answer makes sense.

WORK SPACE AND ANSWER

ANSWER KEY

Two-Step Stories

GRADE 3 · 3.OA.D.8

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	There are 3 bags with 12 marbles in each bag. You give away 10 marbles. How many are left? Write an equation with ___ and solve.	**3 * 12 - 10 = ___; 26 marbles**
2	Share 24 markers equally among 4 cups. Then put 2 more markers in each cup. Complete (24 / 4) + 2 = ___ to find how many markers are in each cup.	**8 markers per cup**
3	A shelf has 18 books. You add 3 stacks of 4 books each. How many books are on the shelf now? Write an equation with ___ and solve.	**18 + 3 * 4 = ___; 30 books**
4	A box has 32 crayons. You take out 16 broken crayons, then share the rest equally between 2 tables. Complete (32 - 16) / 2 = ___ to find how many crayons go on each table.	**8 crayons per table**
5	Each of 4 groups collects 15 trading cards. They share all the cards equally among 6 players. How many cards does each player get? Write an equation with ___ and solve.	**(4 * 15) / 6 = ___; 10 cards per player**
6	There are 14 red and 22 blue game pieces. Share them equally among 3 teams. How many pieces does each team get? Write an equation with ___ and solve.	**(14 + 22) / 3 = ___; 12 pieces per team**

PART 2 · APPLY IT

1. **65 tickets** 6 * 14 - 19 = ___; 84 - 19 = 65. Since 19 is close to 20, 84 - 20 = 64 is a close estimate.
2. **12 slices per box** (28 + 20) / 4 = ___; 48 / 4 = 12. The check, 4 * 12 = 48, matches the total number of slices.

CHALLENGE

3 * 16 - 4 = ___; 44 books. Sam subtracted 4 books from each shelf, but the store sold only 4 books in all. There were 48 books before the sale, and 44 is 4 less than 48.

Accept equivalent equations that use ___ for the unknown and match the story. For checks, accept a different valid mental calculation or estimate.