LESSON MAKER PRO

Division Detectives

Use multiplication to find each quotient.

GRADE 3 · 3.OA.B.6

CCSS.Math.Content.3.OA.B.6 "Understand division as an unknown-factor problem. For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8."

NAME _____ DATE _____

FIND THE MISSING FACTOR

Division can be an unknown-factor problem. In a division equation, multiply the divisor by x to make the dividend. The factor that makes the dividend is the quotient.

WORKED EXAMPLE

48 / 6 = x

1. Write the related multiplication fact: 6 x x = 48.
2. Find the factor: 6 x 8 = 48.
3. So, x = 8.

Answer: 48 / 6 = 8

PRACTICE 6 problems

1 21 / 3 = x

ANSWER _____

2 20 / 5 = x

ANSWER _____

3 4 times x = 28

ANSWER _____

4 45 / 9 = x

ANSWER _____

5 7 times x = 35

ANSWER _____

6 27 / 3 = x

ANSWER _____

APPLY IT Show your work

1 Jordan has 36 trading cards. Jordan puts the same number of cards on each of 4 pages. How many cards are on each page?

WORK SPACE

ANSWER _____

2 The art club has 63 beads. The beads are placed evenly into 9 bracelet kits. How many beads are in each kit?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Lina says 50 / 5 = 9 because 5 x 9 = 45. Is Lina correct? Write the correct quotient and a multiplication fact that proves it.

WORK SPACE AND ANSWER

ANSWER KEY

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PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	21 / 3 = x	**x=7**
2	20 / 5 = x	**x=4**
3	4 times x = 28	**x=7**
4	45 / 9 = x	**x=5**
5	7 times x = 35	**x=5**
6	27 / 3 = x	**x=9**

PART 2 · APPLY IT

1. **9 cards on each page** Find x in 4 times x = 36. Since 4 x 9 = 36, x = 9.
2. **7 beads in each kit** Find x in 9 times x = 63. Since 9 x 7 = 63, x = 7.

CHALLENGE

No. 50 / 5 = 10 because 5 x 10 = 50.

Accept either "x =" answers or the quotient alone for Part 1. For the challenge, accept any clear correction that includes 10 and a multiplication fact showing 5 x 10 = 50.