LESSON MAKER PRO

Groups That Grow

Multiply by counting equal groups.

GRADE 3 · 3.NOS.B.2

3.NOS.B.2 "Represent and interpret multiplication of two factors (0- 10) as equal groups or as a composed unit that can be repeated/iterated. Explain the relationship between the factors and products."

NAME _____ DATE _____

EQUAL GROUPS

The first factor tells how many equal groups there are. The second factor tells how many are in each group. Add the groups to find the product.

WORKED EXAMPLE

How many dots are in the array?



1. Count 2 rows.
2. Each row has 3 dots.
3. Add: 3 + 3 = 6.
4. Multiply: 2 x 3 = 6.

Answer: 6 dots

PRACTICE 4 problems

1 Write a multiplication equation for 4 groups of 5. Find the product.

ANSWER _____

2 For 7 x 4, how many groups are there? How many are in each group?

ANSWER _____

3 Fill in: 8 + 8 + 8 + 8 + 8 = ___ x ___ = ___.

ANSWER _____

4 What is 9 x 0?

ANSWER _____

APPLY IT Show your work

1 At a game, 7 players each earn 5 tickets. How many tickets do they earn in all?

WORK SPACE

ANSWER _____

2 A class packs 10 bags with 8 stickers in each bag. How many stickers are packed?

WORK SPACE

ANSWER _____

CHALLENGE One step up

Write two multiplication equations for this array. Explain why they have the same product.



WORK SPACE AND ANSWER

ANSWER KEY

Groups That Grow

GRADE 3 · 3.NOS.B.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Write a multiplication equation for 4 groups of 5. Find the product.	**4 x 5 = 20**
2	For 7 x 4, how many groups are there? How many are in each group?	**7 groups; 4 in each group**
3	Fill in: 8 + 8 + 8 + 8 + 8 = ___ x ___ = ___.	**5 x 8 = 40**
4	What is 9 x 0?	**0**

PART 2 · APPLY IT

1. **35 tickets** There are 7 groups of 5 tickets. 7 x 5 = 35.
2. **80 stickers** There are 10 groups of 8 stickers. 10 x 8 = 80.

CHALLENGE

4 x 8 = 32 and 8 x 4 = 32. Counting by rows or by columns counts the same dots.

Accept equivalent equations for the word problems. For the challenge, accept any explanation that both equations count all the dots in the same array.