LESSON MAKER PRO

Double It Again

Use doubles to multiply and divide.

GRADE 3 · 3.NOS.E.9.b

3.NOS.E.9.b "Derive unknown facts from known facts using double facts (e.g., to solve 4 × 3, double 3 to get 6 and double 6 to get 12) to multiply and divide."

NAME _____ DATE _____

THE BIG IDEA

To multiply by 4, double a number, then double the result. To multiply by 8, double once more. To divide by 8, think of a number you can double three times to reach the total.

WORKED EXAMPLE

Find 4 × 9 using doubles.

1. Double 9 to get 18, which is 2 × 9.
2. Double 18 to get 36, which is 4 × 9.

Answer: 36

PRACTICE 6 problems

1 Use doubles to find 8 × 3.

ANSWER _____

2 Use doubles to find 8 × 5.

ANSWER _____

3 Use doubles to find 8 × 6.

ANSWER _____

4 Use doubles to find 16 ÷ 8.

ANSWER _____

5 Use doubles to find 56 ÷ 8.

ANSWER _____

6 Use doubles to find 80 ÷ 8.

ANSWER _____

APPLY IT Show your work

1 Eight players each get 2 tickets at an arcade. How many tickets do they get in all? Use doubles.

WORK SPACE

ANSWER _____

2 A group splits 64 game cards equally among 8 players. How many cards does each player get? Use doubles.

WORK SPACE

ANSWER _____

CHALLENGE One step up

Tariq says 8 × 7 = 54. Is Tariq correct? Explain using doubles.

WORK SPACE AND ANSWER

ANSWER KEY

Double It Again

GRADE 3 · 3.NOS.E.9.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use doubles to find 8 × 3.	**24**
2	Use doubles to find 8 × 5.	**40**
3	Use doubles to find 8 × 6.	**48**
4	Use doubles to find 16 ÷ 8.	**2**
5	Use doubles to find 56 ÷ 8.	**7**
6	Use doubles to find 80 ÷ 8.	**10**

PART 2 · APPLY IT

1. **16 tickets** Double 2 to get 4, double 4 to get 8, and double 8 to get 16.
2. **8 cards** Double 8 to get 16, double 16 to get 32, and double 32 to get 64. Each player gets 8 cards.

CHALLENGE

No. Double 7 to get 14, double 14 to get 28, and double 28 to get 56. So 8 × 7 = 56.

Accept any correct doubling path. For division, students may show that eight equal groups make the total.