

Name _____

Associative Property of Multiplication

COMMON CORE STANDARD CC.3.OA.5

Understand properties of multiplication and the relationship between multiplication and division.

Write another way to group the factors.
Then find the product.

1. $(3 \times 2) \times 5$

$$\begin{array}{r} 3 \times (2 \times 5) \\ \hline 30 \end{array}$$

2. $(4 \times 3) \times 2$

$$\begin{array}{r} \hline \hline \end{array}$$

3. $2 \times (2 \times 8)$

$$\begin{array}{r} \hline \hline \end{array}$$

4. $9 \times (2 \times 1)$

$$\begin{array}{r} \hline \hline \end{array}$$

5. $2 \times (3 \times 6)$

$$\begin{array}{r} \hline \hline \end{array}$$

6. $(4 \times 2) \times 5$

$$\begin{array}{r} \hline \hline \end{array}$$

Use parentheses and multiplication properties.
Then, find the product.

7. $9 \times 1 \times 5 = \underline{\quad}$

8. $3 \times 3 \times 2 = \underline{\quad}$

9. $2 \times 4 \times 3 = \underline{\quad}$

10. $5 \times 2 \times 3 = \underline{\quad}$

11. $7 \times 1 \times 5 = \underline{\quad}$

12. $8 \times 2 \times 3 = \underline{\quad}$

13. $7 \times 2 \times 3 = \underline{\quad}$

14. $4 \times 1 \times 3 = \underline{\quad}$

15. $10 \times 2 \times 4 = \underline{\quad}$

Problem Solving



16. Beth and Maria are going to the county fair. Admission costs \$4 per person for each day. They plan to go for 3 days. How much will the girls pay in all?

17. Randy's garden has 3 rows of carrots with 3 plants in each row. Next year he plans to plant 4 times the number of rows of 3 plants. How many plants will he have next year?


Lesson Check (CC.3.OA.5)




- There are 2 benches in each car of a train ride. Two people ride on each bench. If a train has 5 cars, how many people in all can be on a train?
 - (A) 4
 - (B) 9
 - (C) 10
 - (D) 20
- Crystal has 2 CDs in each box. She has 3 boxes on each of her 6 shelves. How many CDs does Crystal have in all?
 - (A) 6
 - (B) 12
 - (C) 18
 - (D) 36

Spiral Review (CC.3.OA.3, CC.3.NBT.1, CC.3.NBT.2, CC.MD.3)

- Find the sum. (Lesson 1.7)

$$\begin{array}{r} 472 \\ + 186 \\ \hline \end{array}$$
 - (A) 658
 - (B) 648
 - (C) 558
 - (D) 286
- Trevor made a picture graph to show how many minutes each student biked last week. This is his key.

Each  = 10 minutes.

What does    stand for? (Lesson 2.2)

 - (A) 2 minutes
 - (B) 10 minutes
 - (C) 20 minutes
 - (D) 25 minutes
- Madison has 142 stickers in her collection. What is 142 rounded to the nearest ten? (Lesson 1.2)
 - (A) 40
 - (B) 140
 - (C) 150
 - (D) 200
- There are 5 pages of photos. Each page has 6 photos. How many photos are there in all? (Lesson 4.2)
 - (A) 12
 - (B) 20
 - (C) 24
 - (D) 30