



# Properties of Multiplication

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Grade: Grade 3

## Part A: Fill in the Blank

Write the missing word or number on each line.

- Grade 3 commutative:  $4 \times 7 = 7 \times$  \_\_\_\_\_ so the product stays the same.
- Grade 3: use commutative to rewrite  $2 \times 9$  as  $9 \times$  \_\_\_\_\_ and solve to 18.
- Grade 3 associative:  $(2 \times 3) \times 5 = 2 \times (3 \times$  \_\_\_\_\_  $) = 30$ .
- Grade 3: to solve  $5 \times 7 \times 2$  easily, first do  $5 \times 2 = 10$ , then  $10 \times 7 =$  \_\_\_\_\_ .
- Grade 3:  $4 \times 3 \times 25 = 4 \times 25 \times 3 = 100 \times 3 =$  \_\_\_\_\_ .
- Grade 3:  $6 \times 5 \times 2 = 6 \times (5 \times 2) = 6 \times$  \_\_\_\_\_  $= 60$ .
- Grade 3 commutative:  $8 \times 3 =$  \_\_\_\_\_  $\times 8$  with product 24.
- Grade 3:  $(4 \times 2) \times 6 = 4 \times (2 \times 6) = 4 \times 12 =$  \_\_\_\_\_ .
- Grade 3:  $7 \times 2 \times 5$  rearranges to  $7 \times (2 \times 5) = 7 \times 10 =$  \_\_\_\_\_ .

## Part B: Matching

Match each item on the left to the correct answer on the right.

- Match each item to its correct answer.

Grade 3:  $3 \times 4 \times 5$  rearranged as  $3 \times (4 \times 5)$

→ \_\_\_\_\_

60

Grade 3:  $6 \times 2 \times 5$  grouped as  $6 \times (2 \times 5)$

→ \_\_\_\_\_

60 also

Grade 3:  $4 \times 25 \times 2$  grouped as  $(4 \times 25) \times 2$

→ \_\_\_\_\_

200

Grade 3:  $8 \times 5 \times 2$  grouped as  $8 \times (5 \times 2)$

→ \_\_\_\_\_

80

## Answer Key · Properties of Multiplication · Grade: Grade 3

---

### Part A: Fill in the Blank

---

Write the missing word or number on each line.

- Grade 3 commutative:  $4 \times 7 = 7 \times \underline{4}$  so the product stays the same.
- Grade 3: use commutative to rewrite  $2 \times 9$  as  $9 \times \underline{2}$  and solve to 18.
- Grade 3 associative:  $(2 \times 3) \times 5 = 2 \times (3 \times \underline{5}) = 30$ .
- Grade 3: to solve  $5 \times 7 \times 2$  easily, first do  $5 \times 2 = 10$ , then  $10 \times 7 = \underline{70}$ .
- Grade 3:  $4 \times 3 \times 25 = 4 \times 25 \times 3 = 100 \times 3 = \underline{300}$ .
- Grade 3:  $6 \times 5 \times 2 = 6 \times (5 \times 2) = 6 \times \underline{10} = 60$ .
- Grade 3 commutative:  $8 \times 3 = \underline{3}$   $\times 8$  with product 24.
- Grade 3:  $(4 \times 2) \times 6 = 4 \times (2 \times 6) = 4 \times 12 = \underline{48}$ .
- Grade 3:  $7 \times 2 \times 5$  rearranges to  $7 \times (2 \times 5) = 7 \times 10 = \underline{70}$ .

### Part B: Matching

---

Match each item on the left to the correct answer on the right.

- Match each item to its correct answer.

|  |                  |         |
|--|------------------|---------|
| Grade 3: $3 \times 4 \times 5$ rearranged as $3 \times (4 \times 5)$ | → <u>60</u>      | 60      |
| Grade 3: $6 \times 2 \times 5$ grouped as $6 \times (2 \times 5)$    | → <u>60 also</u> | 60 also |
| Grade 3: $4 \times 25 \times 2$ grouped as $(4 \times 25) \times 2$  | → <u>200</u>     | 200     |
| Grade 3: $8 \times 5 \times 2$ grouped as $8 \times (5 \times 2)$    | → <u>80</u>      | 80      |