# Match or Not

Compare both sides to sort each expression pair.

**4.CE.2.d** "Identify and use the appropriate symbol to distinguish between expressions that are equal and expressions that are not equal, using addition, subtraction, multiplication, and division (e.g., 4 × 12 = 8 × 6 and 64 ÷ 8 ≠ 8 × 8)."

NAME _____ DATE _____

**SAME VALUE**

Both expressions have the same value. Use the symbol = between them.

$17 + 13 = 6 \times 5$

**DIFFERENT VALUE**

The expressions have different values. Use the symbol ≠ between them.

$96 \div 12 \neq 20 - 11$

## 1 SORT

8 items

For each pair, circle EQUAL or NOT EQUAL, then choose two numbered pairs and tell how you found each side's value.

| | | |
|---|---|---|
| **1.** | $8 \times 8 \mid 71 - 7$ | EQUAL NOT EQUAL |
| **2.** | $63 \div 7 \mid 4 + 4$ | EQUAL NOT EQUAL |
| **3.** | $15 + 14 \mid 4 \times 7$ | EQUAL NOT EQUAL |
| **4.** | $56 \div 8 \mid 9 - 2$ | EQUAL NOT EQUAL |
| **5.** | $24 + 18 \mid 14 \times 3$ | EQUAL NOT EQUAL |
| **6.** | $8 \times 9 \mid 83 - 10$ | EQUAL NOT EQUAL |
| **7.** | $81 \div 9 \mid 16 - 7$ | EQUAL NOT EQUAL |
| **8.** | $42 \div 7 \mid 2 \times 4$ | EQUAL NOT EQUAL |

## 2 PROVE IT

Explain your thinking

Pick two items from Part 1. For each one, tell how you knew where it belonged.

**ITEM #** _____ **HOW I KNEW** _____

**ITEM #** _____ **HOW I KNEW** _____

## 3 MAKE YOUR OWN

One of each

Write one new EQUAL pair and one new NOT EQUAL pair. Put the correct symbol between the expressions.

**EQUAL** _____

**NOT EQUAL** _____

**CHALLENGE**

Write an equal pair that uses addition, subtraction, multiplication, and division.

**ANSWER KEY** # Match or Not



## PART 1 · SORT

| # | ITEM | CATEGORY | WHY |
|---|---|---|---|
| 1 | 8 × 8 \| 71 − 7 | **EQUAL** | Both sides equal 64. |
| 2 | 63 ÷ 7 \| 4 + 4 | **NOT EQUAL** | The sides equal 9 and 8. |
| 3 | 15 + 14 \| 4 × 7 | **NOT EQUAL** | The sides equal 29 and 28. |
| 4 | 56 ÷ 8 \| 9 − 2 | **EQUAL** | Both sides equal 7. |
| 5 | 24 + 18 \| 14 × 3 | **EQUAL** | Both sides equal 42. |
| 6 | 8 × 9 \| 83 − 10 | **NOT EQUAL** | The sides equal 72 and 73. |
| 7 | 81 ÷ 9 \| 16 − 7 | **EQUAL** | Both sides equal 9. |
| 8 | 42 ÷ 7 \| 2 × 4 | **NOT EQUAL** | The sides equal 6 and 8. |

## PART 2 · PROVE IT

Accept any explanation that names the deciding feature from the rule box for the chosen item.

## PART 3 · MAKE YOUR OWN (SAMPLE ANSWERS)

- **EQUAL**: 54 ÷ 9 = 5 + 1
- **NOT EQUAL**: 7 × 8 ≠ 60 − 3

**Challenge:** 8 × 6 + 4 = 72 ÷ 2 + 20 − 4. Left side: 48 + 4 = 52. Right side: 36 + 20 − 4 = 52. The pair uses all four operations.

Items 1, 4, 5, and 7 are EQUAL. Items 2, 3, 6, and 8 are NOT EQUAL. Accept student-created pairs when both sides are correctly evaluated and the symbol matches. For the challenge, also verify addition, subtraction, multiplication, and division all appear in the equal pair.