

Symbol Sort

Find which number pairs match.

3.CE.1.d "Identify and use the appropriate symbol to distinguish between expressions that are equal and expressions that are not equal (e.g., $256 - 13 = 220 + 23$; $457 + 100 \neq 557 + 100$)."

NAME _____

DATE _____

EQUAL VALUES

Use $=$ when both sides have the same value. Find the value of each side before you choose.

$$38 + 27 = 70 - 5$$

NOT EQUAL VALUES

Use $\neq$ when the two sides have different values. The symbol $\neq$ means not equal to.

$$94 - 18 \neq 50 + 25$$

1 SORT _____ 8 items

For each pair, circle EQUAL or NOT EQUAL, then choose two items and explain how you found the value on each side.

1. $125 + 40$ ____ $150 + 15$ EQUAL NOT EQUAL

2. $620 - 90$ ____ $500 + 30$ EQUAL NOT EQUAL

3. $430 + 70$ ____ $600 - 90$ EQUAL NOT EQUAL

4. $900 - 250$ ____ $300 + 350$ EQUAL NOT EQUAL

5. $275 + 125$ ____ $450 - 40$ EQUAL NOT EQUAL

6. $800 - 375$ ____ $200 + 220$ EQUAL NOT EQUAL

7. $460 + 140$ ____ $700 - 100$ EQUAL NOT EQUAL

8. $640 - 180$ ____ $300 + 160$ 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 comparison that uses = and one new comparison that uses $\neq$.

EQUAL _____

NOT EQUAL _____

CHALLENGE

Write an equal comparison using three addends on one side and two addends on the other. Use =.

PART 1 • SORT

#	ITEM	CATEGORY	WHY
1	$125 + 40 \underline{\hspace{1cm}} 150 + 15$	EQUAL	Both sides equal 165.
2	$620 - 90 \underline{\hspace{1cm}} 500 + 30$	EQUAL	Both sides equal 530.
3	$430 + 70 \underline{\hspace{1cm}} 600 - 90$	NOT EQUAL	The left side is 500 and the right side is 510.
4	$900 - 250 \underline{\hspace{1cm}} 300 + 350$	EQUAL	Both sides equal 650.
5	$275 + 125 \underline{\hspace{1cm}} 450 - 40$	NOT EQUAL	The left side is 400 and the right side is 410.
6	$800 - 375 \underline{\hspace{1cm}} 200 + 220$	NOT EQUAL	The left side is 425 and the right side is 420.
7	$460 + 140 \underline{\hspace{1cm}} 700 - 100$	EQUAL	Both sides equal 600.
8	$640 - 180 \underline{\hspace{1cm}} 300 + 160$	EQUAL	Both sides equal 460.

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:** $56 + 19 = 80 - 5$
- **NOT EQUAL:** $63 + 28 \neq 70 + 20$

Challenge: $120 + 35 + 45 = 100 + 100$

For Part 2, accept explanations that correctly find or compare both side values. Part 3 and the challenge may have more than one correct answer if the symbols match the values.