Name: _____

Associative Property of Addition

The *Associative Property of Addition* states that the sum of a set of numbers is the same, no matter how they are grouped.

Example: $(2 + 3) + 7 = 2 + (3 + 7)$
$5 + 7 = 2 + 10$
$12 = 12$

Part 1: Tell whether the sets of numbers are equal or not equal. Write an "equals sign" (=) on the line if the sets have equal sums. Write a "not equals sign" (≠) if the sets have unequal sums.

a. $(3 + 4) + 5$ _____ $3 + (5 + 6)$

b. $(9 + 5) + 6$ _____ $9 + (5 + 6)$

c. $13 + (42 + 90)$ _____ $(13 + 24) + 90$

d. $(54 + 85) + 36$ _____ $54 + (85 + 36)$

Part 2: Find the sum of the numbers on the left of the "equals sign" (=) and the sum of the numbers on the right. Write your answers on the lines below each problem.

e. $(7 + 8) + 9 = 7 + (8 + 9)$

_____ _____

f. $(60 + 50) + 75 = 60 + (50 + 75)$

_____ _____

g. $(56 + 74) + 12 = 56 + (74 + 12)$

_____ _____

h. $(93 + 23) + 106 = 93 + (23 + 106)$

_____ _____

Name: _____ ANSWER KEY

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a. $(3 + 4) + 5$ ___≠___ $3 + (5 + 6)$

b. $(9 + 5) + 6$ ___=___ $9 + (5 + 6)$

c. $13 + (42 + 90)$ ___≠___ $(13 + 24) + 90$

d. $(54 + 85) + 36$ ___=___ $54 + (85 + 36)$

Part 2: Find the sum of the numbers on the left of the "equals sign" (=) and the sum of the numbers on the right. Write your answers on the lines below each problem.

e. $(7 + 8) + 9 = 7 + (8 + 9)$

___24___ ___24___

f. $(60 + 50) + 75 = 60 + (50 + 75)$

___185___ ___185___

g. $(56 + 74) + 12 = 56 + (74 + 12)$

___142___ ___142___

h. $(93 + 23) + 106 = 93 + (23 + 106)$

___222___ ___222___