Regroup to Make Sense

1. Apples in Baskets - There are 3 baskets, and each basket has 5 bags. Each bag holds 4 apples. Show two ways to group the numbers to find the total apples.

Way 1: $(3 × 5) × 4 =$ _____   Way 2: $3 × (5 × 4) =$ _____
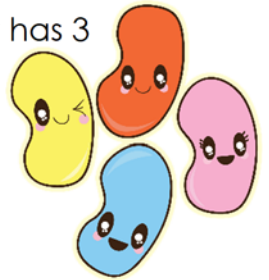
Which is easier to solve mentally? _____

2. Boxes of Markers - Each box has 10 packs of markers, and each pack contains 6 markers. Write and solve two associative property equations for this situation.

Equation 1: $(10 × 6) × 1 =$ _____   Equation 2: $10 × (6 × 1) =$ _____

What do both equal? _____

3. Lunch Orders - A cafeteria sells 4 trays of sandwiches, and each tray has 3 boxes. Each box contains 5 sandwiches.
a) Write two different groupings for this situation.
b) Solve both groupings.
c) Explain why the answers are the same.

_____

_____

_____

4. Choose an easier way to group and solve:

a) $25 + 75 + 100 =$ _____   Group as: $(25 + 75) + 100$ or $25 + (75 + 100)$?

Which grouping makes it easier? _____

b) $4 × 5 × 25 =$ _____   Group as: $(4 × 5) × 25$ or $4 × (5 × 25)$?

Which grouping makes it easier? _____

5. Show how you could group these numbers to make the math simple.

a) $50 + 25 + 75 =$ _____ b) $2 × 8 × 50 =$ _____

6. Fill in the missing number.

$(7 + 9) +$ ___ $= 7 + (9 + 2)$ Answer: _____

$(3 × 4) ×$ ___ $= 3 × (4 × 5)$ Answer: _____