Name _____

LESSON 10.7
Reteach

Use Properties of Addition

Properties of addition can help you group and order addends so you can use mental math to find sums.

The **Commutative Property of Addition** states that when the order of two addends is changed, the sum is the same. $6 + 3 = 3 + 6$

The **Associative Property of Addition** states that when the grouping of addends is changed, the sum is the same. $(3 + 6) + 4 = 3 + (6 + 4)$

Use the properties and mental math to add $10\frac{3}{8} + 4\frac{7}{8} + 6\frac{5}{8}$.

Step 1 Look for fractions that combine to make 1. $10\frac{3}{8} + 4\frac{7}{8} + 6\frac{5}{8}$

Step 2 Use the Commutative Property to order the addends so that the fractions with a sum of 1 are together. $10\frac{3}{8} + 4\frac{7}{8} + 6\frac{5}{8} = 10\frac{3}{8} + 6\frac{5}{8} + 4\frac{7}{8}$

Step 3 Use the Associative Property to group the addends that you can add mentally. $= \left(10\frac{3}{8} + 6\frac{5}{8}\right) + 4\frac{7}{8}$

Step 4 Add the grouped numbers and then add the other mixed number. $= (17) + 4\frac{7}{8}$

Step 5 Write the sum. $= 21\frac{7}{8}$

Use the properties and mental math to find the sum.

1 $\left(3\frac{1}{5} + 1\frac{2}{5}\right) + 4\frac{4}{5}$ _____

2 $\left(5\frac{7}{10} + 1\frac{4}{10}\right) + 6\frac{3}{10}$ _____

3 $7\frac{3}{4} + \left(5 + 3\frac{1}{4}\right)$ _____

4 $\left(2\frac{5}{12} + 3\frac{11}{12}\right) + 1\frac{7}{12}$ _____

5 $4\frac{7}{8} + \left(6\frac{3}{8} + \frac{1}{8}\right)$ _____

6 $9\frac{2}{6} + \left(4\frac{1}{6} + 7\frac{4}{6}\right)$ _____