

Name _____

Use Properties of Addition



COMMON CORE STANDARD—5.NF.A.1
Use equivalent fractions as a strategy to add and subtract fractions.

Use the properties and mental math to solve. Write your answer in simplest form.

$$\begin{aligned}
 1. \quad & \left(2\frac{1}{3} + 1\frac{2}{5}\right) + 3\frac{2}{3} \\
 & = \left(1\frac{2}{5} + 2\frac{1}{3}\right) + 3\frac{2}{3} \\
 & = 1\frac{2}{5} + \left(2\frac{1}{3} + 3\frac{2}{3}\right) \\
 & = 1\frac{2}{5} + 6 \\
 & = 7\frac{2}{5}
 \end{aligned}$$

$$2. \quad 8\frac{1}{5} + \left(4\frac{2}{5} + 3\frac{3}{10}\right)$$

$$3. \quad \left(2\frac{3}{8} + 1\frac{3}{4}\right) + 5\frac{7}{8}$$

$$4. \quad 2\frac{1}{10} + \left(1\frac{2}{7} + 4\frac{9}{10}\right)$$

$$5. \quad 3\frac{1}{4} + \left(3\frac{1}{4} + 5\frac{1}{5}\right)$$

$$6. \quad 1\frac{1}{4} + \left(3\frac{2}{3} + 5\frac{3}{4}\right)$$

Problem Solving



7. Elizabeth rode her bike $6\frac{1}{2}$ miles from her house to the library and then another $2\frac{2}{5}$ miles to her friend Milo's house. If Carson's house is $2\frac{1}{2}$ miles beyond Milo's house, how far would she travel from her house to Carson's house?

8. Hassan made a vegetable salad with $2\frac{3}{8}$ pounds of tomatoes, $1\frac{1}{4}$ pounds of asparagus, and $2\frac{7}{8}$ pounds of potatoes. How many pounds of vegetables did he use altogether?

9. **WRITE** *Math* Write Commutative Property and Associative Property at the top of the page. Underneath the name of each property, write its definition and three examples of its use.

Lesson Check (5.NF.A.1)

1. What is the sum of $2\frac{1}{3}$, $3\frac{5}{6}$, and $6\frac{2}{3}$?
2. Letitia has $7\frac{1}{6}$ yards of yellow ribbon, $5\frac{1}{4}$ yards of orange ribbon, and $5\frac{1}{6}$ yards of brown ribbon. How much ribbon does she have altogether?

Spiral Review (5.OA.A.1, 5.NBT.B.6, 5.NBT.B.7, 5.NF.A.1)

3. Juanita wrote 3×47 as $3 \times 40 + 3 \times 7$. What property did she use to rewrite the expression?
4. What is the value of the expression?

$$18 - 2 \times (4 + 3)$$

5. Evan spent \$15.89 on 7 pounds of birdseed. How much did the birdseed cost per pound?
6. Cade rode $1\frac{3}{5}$ miles on Saturday and $1\frac{3}{4}$ miles on Sunday. How far did he ride on the two days?

