Fractions and Properties of Addition

COMMON CORE STANDARD CC.4.NF.3c

Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

Use the properties and mental math to find the sum.

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

2.
$$10\frac{1}{8} + \left(3\frac{5}{8} + 2\frac{7}{8}\right)$$

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

$$5\frac{1}{3} + (4)$$

$$9\frac{1}{3}$$

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

5.
$$\left(6\frac{3}{6} + 10\frac{4}{6}\right) + 9\frac{2}{6}$$
 6. $\left(6\frac{2}{5} + 1\frac{4}{5}\right) + 3\frac{1}{5}$

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

7.
$$7\frac{7}{8} + (3\frac{1}{8} + 1\frac{1}{8})$$

8.
$$14\frac{1}{10} + \left(20\frac{2}{10} + 15\frac{7}{10}\right)$$
 9. $\left(13\frac{2}{12} + 8\frac{7}{12}\right) + 9\frac{5}{12}$

9.
$$\left(13\frac{2}{12} + 8\frac{7}{12}\right) + 9\frac{5}{12}$$

Problem Solving REAL WORLD



- 10. Nate's classroom has three tables of different lengths. One has a length of $4\frac{1}{2}$ feet, another has a length of 4 feet, and a third has a length of $2\frac{1}{2}$ feet. What is the length of all three tables when pushed end to end?
- **11.** Mr. Warren uses $2\frac{1}{4}$ bags of mulch for his garden and another $4\frac{1}{4}$ bags for his front yard. He also uses $\frac{3}{4}$ bag around a fountain. How many total bags of mulch does Mr. Warren use?

TEST

Lesson Check (CC.4.NF.3c)

- 1. A carpenter cut a board into three pieces. One piece was $2\frac{5}{6}$ feet long. The second piece was $3\frac{1}{6}$ feet long. The third piece was $1\frac{5}{6}$ feet long. How long was the board?
 - $\bigcirc 6\frac{5}{6}$ feet
 - **B** $7\frac{1}{6}$ feet
 - © $7\frac{5}{6}$ feet
 - \bigcirc 8 $\frac{1}{6}$ feet

- 2. Harry works at an apple orchard. He picked $45\frac{7}{8}$ pounds of apples on Monday. He picked $42\frac{3}{8}$ pounds of apples on Wednesday. He picked $54\frac{1}{8}$ pounds of apples on Friday. How many pounds of apples did Harry pick those three days?
 - **(A)** $132\frac{3}{8}$ pounds
 - **B** $141\frac{3}{8}$ pounds
 - \bigcirc 142 $\frac{1}{8}$ pounds
 - \bigcirc 142 $\frac{3}{8}$ pounds

Spiral Review (CC.4.OA.4, CC.4.NBT.5, CC.4.NBT.6, CC.4.NF.3c)

- 3. There were 6 oranges in the refrigerator. Joey and his friends ate $3\frac{2}{3}$ oranges. How many oranges were left? (Lesson 7.8)
 - \bigcirc 2 $\frac{1}{3}$ oranges
 - **B** $2\frac{2}{3}$ oranges
 - \bigcirc 3 $\frac{1}{3}$ oranges
 - \bigcirc $9\frac{2}{3}$ oranges

- **4.** Darlene was asked to identify which of the following numbers is prime. Which number should she choose? (Lesson 5.5)
 - (A) 2
 - **B** 12
 - **©** 21
 - **(D)** 39
- 5. A teacher has 100 chairs to arrange for an assembly. Which of the following is NOT a way the teacher could arrange the chairs? (Lesson 5.2)
 - (A) 10 rows of 10 chairs
 - **B** 8 rows of 15 chairs
 - © 5 rows of 20 chairs
 - (D) 4 rows of 25 chairs

- 6. Nic bought 28 folding chairs for \$16 each. How much money did Nic spend on chairs? (Lesson 3.5)
 - **A** \$196
 - **(B)** \$348
 - **(c)** \$448
 - **(D)** \$600