



Name _____

Comparing and Ordering Fractions and Mixed Numbers

R 4-8

A **mixed number** is a number written as a whole number and a fraction, such as $3\frac{1}{5}$, $7\frac{4}{9}$, or $1\frac{15}{16}$.

- You can write a mixed number as an improper fraction.

Write $3\frac{1}{5}$ as an improper fraction.

Step 1

Write the whole number as a fraction.

$$3 = \frac{15}{5}$$

Step 2

Combine the fractions.

$$3\frac{1}{5} = \frac{15}{5} + \frac{1}{5} = \frac{16}{5}$$

An **improper fraction** is a fraction with a numerator that is larger than the denominator, such as $\frac{17}{3}$, $\frac{6}{5}$, or $\frac{19}{12}$.

- You can write an improper fraction as a mixed number.

Write $\frac{17}{3}$ as a mixed number.

Step 1

Divide the numerator by the denominator.

$$\begin{array}{r} 5\frac{2}{3} \\ 3 \overline{)17} \\ \underline{15} \\ 2 \end{array}$$

Step 2

Simplify if possible.

$$\frac{17}{3} = 5\frac{2}{3}$$

Write each improper fraction as a mixed number and each mixed number as an improper fraction.

1. $\frac{9}{2}$ _____

2. $\frac{43}{7}$ _____

3. $18\frac{2}{3}$ _____

4. $6\frac{1}{3}$ _____

5. $\frac{23}{2}$ _____

6. $\frac{16}{6}$ _____

7. $14\frac{2}{5}$ _____

8. $17\frac{1}{2}$ _____

Compare. Write $<$, $>$, or $=$ for each .

9. $\frac{2}{5}$ $\frac{3}{10}$

10. $\frac{9}{2}$ $4\frac{1}{2}$

11. $4\frac{7}{9}$ $4\frac{5}{6}$

12. $\frac{17}{6}$ $\frac{11}{4}$

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

14. $\frac{5}{6}$ $\frac{7}{8}$

15. $\frac{7}{20}$ $\frac{3}{10}$

16. $\frac{16}{3}$ $\frac{11}{4}$

17. $\frac{2}{3}$ $\frac{4}{6}$

18. $\frac{4}{8}$ $\frac{2}{8}$

19. $\frac{3}{7}$ $\frac{5}{7}$

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

21. A recipe for marinara sauce requires $1\frac{3}{4}$ teaspoons of oregano, $1\frac{1}{2}$ teaspoons of marjoram, $1\frac{1}{3}$ teaspoons of fennel seed and $1\frac{1}{4}$ teaspoons of basil. A cook will need the greatest amount of which herb? the smallest? _____