Name _____

Subtract Mixed Numbers

12-4 RETEACH

When subtracting mixed numbers, you may have to rename twice. First, you must rename one or both fractions using the LCD. Then you must rename a mixed or whole number so you can subtract the fractions.

Subtract $9\frac{3}{10} - 3\frac{1}{2}$. Estimate: $9 - 4 = 5$

Step 1

Write the problem in vertical form.

Write equivalent fractions using the LCD.

$$\begin{array}{r} 9\frac{3}{10} = 9\frac{3}{10} \\ -\,3\frac{1}{2} = -\,3\frac{5}{10} \\ \hline \end{array}$$

Step 2

Rename the mixed number you are subtracting from.

$$\begin{array}{r} 9\frac{3}{10} = 8\frac{10}{10} + \frac{3}{10} = 8\frac{13}{10} \\ -\,3\frac{5}{10} = \quad -\,3\frac{5}{10} \\ \hline \end{array}$$

Step 3

Subtract the fractions. Then subtract the whole numbers. Simplify.

$$\begin{array}{r} 8\frac{13}{10} \\ -\,3\frac{5}{10} \\ \hline 5\frac{8}{10} = 5\frac{4}{5} \end{array}$$

Subtract. Write your answer in simplest form.

1. $7\frac{1}{4} - 4\frac{1}{2} =$ _____ **2.** $8 - 2\frac{4}{5} =$ _____ **3.** $12\frac{7}{10} - 5\frac{4}{5} =$ _____

4. $8\frac{5}{12} - 1\frac{2}{3} =$ _____ **5.** $15\frac{3}{8} - 6\frac{3}{4} =$ _____ **6.** $14 - 5\frac{11}{16} =$ _____

7. $5\frac{1}{3} - 4\frac{3}{4} =$ _____ **8.** $10\frac{1}{2} - 3\frac{9}{10} =$ _____ **9.** $13\frac{3}{5} - 7\frac{2}{3} =$ _____

10. $14\frac{7}{8} - 5$ **11.** $35\frac{7}{8} - 21\frac{1}{4}$ **12.** $9\frac{3}{10} - 8\frac{7}{10}$ **13.** $17 - 7\frac{4}{5}$

14. $11\frac{2}{3} - 3\frac{2}{5}$ **15.** $46 - 27\frac{1}{5}$ **16.** $99\frac{9}{10} - 75\frac{3}{5}$ **17.** $16\frac{3}{8} - 7\frac{3}{5}$

Name _____

Subtract Mixed Numbers

P 12-4 PRACTICE

Subtract. Write your answer in simplest form.

1. $7\frac{15}{16} - 2\frac{11}{16} =$ _____ **2.** $11\frac{4}{5} - 4\frac{3}{10} =$ _____ **3.** $12 - 9\frac{1}{3} =$ _____

4. $18\frac{1}{6} - 9\frac{5}{6} =$ _____ **5.** $9 - 5\frac{1}{12} =$ _____ **6.** $16\frac{1}{3} - 7\frac{7}{10} =$ _____

7. $34\frac{11}{20} - 15 =$ _____ **8.** $64\frac{3}{4} - 37\frac{11}{12} =$ _____ **9.** $51\frac{2}{5} - 25\frac{3}{4} =$ _____

10. $46 - 27\frac{3}{4} =$ _____ **11.** $82\frac{4}{5} - 62 =$ _____ **12.** $23\frac{1}{8} - 15\frac{2}{5} =$ _____

13. $16 - 7\frac{11}{12} =$ _____ **14.** $35\frac{7}{8} - 21\frac{1}{4} =$ _____ **15.** $97 - 87\frac{4}{5} =$ _____

16. $6\frac{11}{12} - 4\frac{5}{12}$ **17.** $11\frac{2}{3} - 3\frac{2}{5}$ **18.** $14\frac{7}{8} - 5$ **19.** $15\frac{1}{6} - 6\frac{1}{4}$

20. $9\frac{3}{10} - 8\frac{7}{10}$ **21.** $12\frac{1}{2} - 3\frac{1}{5}$ **22.** $44 - 21\frac{13}{16}$ **23.** $74\frac{3}{8} - 38\frac{3}{5}$

24. $50\frac{1}{2} - 41$ **25.** $35\frac{3}{8} - 18\frac{3}{4}$ **26.** $99\frac{9}{10} - 75\frac{3}{5}$ **27.** $23 - 14\frac{5}{12}$

Problem Solving

Solve.

28. A grocery bag will hold 8 pounds of oranges. Kyle puts $3\frac{5}{8}$ pounds of oranges in the bag. How many more pounds of oranges can he put in the bag?

_____

29. Sara needs $2\frac{1}{2}$ pounds of grapes for a salad. She buys a bag of grapes that weighs only $1\frac{7}{8}$ pounds. How many more pounds of grapes does she need?

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