

## Fractions: Skill 5 - 13C

### Subtract Fractions and Mixed Numbers with Renaming

A part of a whole number can be renamed as a fraction.

Test question 13C: Subtract  $2 - 1\frac{2}{3}$

| Test Question 13C   | Example  |
|---|--|
| $2 - 1\frac{2}{3}$  | $2\frac{1}{4} - 1\frac{2}{3}$  |
| 1. Rename 2 as $1\frac{3}{3}$ $\frac{3}{3} = 1$ so $1\frac{3}{3} = 2$ | Use the LCD to write equivalent fractions. $2\frac{3}{12} - 1\frac{8}{12}$ |
| $2 - 1\frac{2}{3} = 1\frac{3}{3} - 1\frac{2}{3}$                      | Rename $2\frac{3}{12}$ as $1\frac{15}{12}$                                 |
| 2. Subtract. $1\frac{3}{3} - 1\frac{2}{3} = \frac{1}{3}$              | $1\frac{15}{12} - 1\frac{8}{12} = \frac{7}{12}$                            |

Another way is to use fraction bars.

$$2\frac{1}{4} - 1\frac{2}{3}$$

Use fraction bars to model the mixed number  $2\frac{1}{4}$ .



Next, change the fraction bars to show  $2\frac{3}{12}$  using the LCD. (look at the 2<sup>nd</sup> line above under "Example")



Rename one whole bar as  $\frac{12}{12}$



Subtract  $1\frac{8}{12}$  (look at the 2<sup>nd</sup> line above under "Example")

The bars that you should remove are marked out.



$$1\frac{15}{12} - 1\frac{8}{12} = \frac{7}{12}$$

## Fractions: Skill 5 - 13C

**Subtract Fractions with Renaming**

**Directions:** Subtract using fraction bars or paper and pencil. Write the answer in simplest form. Problem number 1 is done for you as an example.

|  |   |
|--|---|
| 1.<br>$\begin{array}{r} 2\frac{1}{3} \\ - 1\frac{4}{6} \\ \hline 2\frac{2}{3} \end{array}$ | 1. Use the LCD $2\frac{2}{6} - 1\frac{4}{6} =$<br>2. Rename $1\frac{8}{6} - 1\frac{4}{6} =$<br>3. Subtract and Simplify $\frac{4}{6} = \frac{2}{3}$ |
|--|---|

2.  
$$\begin{array}{r} 4\frac{1}{4} \\ - 2\frac{3}{8} \\ \hline \end{array}$$

3.  
$$\begin{array}{r} 6\frac{3}{12} \\ - 2\frac{2}{3} \\ \hline \end{array}$$

4.  
$$\begin{array}{r} 3\frac{3}{10} \\ - 1\frac{3}{5} \\ \hline \end{array}$$

5.  
$$\begin{array}{r} 4\frac{2}{5} \\ - 2\frac{2}{4} \\ \hline \end{array}$$

6.  
$$\begin{array}{r} 6\frac{1}{8} \\ - 3\frac{5}{16} \\ \hline \end{array}$$

7.  
$$\begin{array}{r} 3\frac{2}{9} \\ - 1\frac{2}{3} \\ \hline \end{array}$$

8.  
$$\begin{array}{r} 8\frac{3}{8} \\ - 4\frac{1}{2} \\ \hline \end{array}$$

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

10.  
$$\begin{array}{r} 8\frac{2}{5} \\ - 1\frac{1}{2} \\ \hline \end{array}$$

11.  
$$\begin{array}{r} 6\frac{2}{7} \\ - 4\frac{7}{14} \\ \hline \end{array}$$

12.  
$$\begin{array}{r} 5\frac{2}{6} \\ - 2\frac{2}{3} \\ \hline \end{array}$$

13.  
$$\begin{array}{r} 9\frac{3}{16} \\ - 4\frac{3}{8} \\ \hline \end{array}$$

14.  
$$\begin{array}{r} 6\frac{5}{12} \\ - 3\frac{3}{4} \\ \hline \end{array}$$

Answers: Skill 13C, Grade 5

1.  $\frac{2}{3}$

2.  $1\frac{7}{8}$

3.  $3\frac{7}{12}$

4.  $1\frac{7}{10}$

5.  $1\frac{9}{10}$

6.  $2\frac{13}{16}$

7.  $1\frac{5}{9}$

8.  $3\frac{7}{8}$

9.  $3\frac{5}{6}$

10.  $6\frac{9}{10}$

11.  $1\frac{11}{14}$

12.  $2\frac{2}{3}$

13.  $4\frac{13}{16}$

14.  $2\frac{2}{3}$