

# 4 Prep for Algebra with Fractions

March 10, 2019 7:08 PM

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Period: \_\_\_\_\_

Find the **least common multiple (LCM)**. The first one is done for you.

- (a) 2 and 7  
 2: 2, 4, 6, 8, 10, 12, (14)  
 7: 7, (14)  
 LCM(2, 7) = 14
1. 4 and 8 LCM=8  
 4, (8)  
 (8), 16, 24,
2. 3 and 4  
 3, 6, 9, (12)..  
 4, 8, (12)...
3. 6 and 4  
 6, (12)  
 4, 8, (12)

Find the **least common denominator (LCD)**. The first one is done for you.

- (b)  $\frac{1}{2}$  and  $\frac{5}{6}$   
 2: 2, 4, 6  
 6: 6  
 LCD(2, 6) = 6
4.  $\frac{3}{4}$  and  $\frac{4}{9}$   
 4, 8, 12, 16, 20, 24, 28, 32, 36  
 9, 18, 27, 36
5.  $\frac{2}{3}$  and  $\frac{2}{7}$   
 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39, 42  
 7, 14, 21, 28, 35, 42  
 LCD = 21
6.  $\frac{1}{6}$  and  $\frac{2}{9}$   
 6, 12, 18, 24, 30, 36  
 9, 18, 27, 36

**Multiply. Write your answer in simplest form.** The first two are done for you.

- (c)  $6 \cdot \frac{1}{2}$   
 $3 \cdot \frac{1}{1} = 3$
- (d)  $36 \cdot \frac{3}{4}$   
 $9 \cdot 3 = 27$
7.  $\frac{21}{1} \cdot \frac{2}{3}$   
 $= 7 \cdot 2 = 14$
8.  $\frac{18}{7} \cdot \frac{1}{6}$   
 $= 3$
9.  $\frac{6}{7} \cdot \frac{5}{6}$   
 $= 5$
10.  $\frac{36}{7} \cdot \frac{1}{9}$   
 $= 16$
11.  $\frac{21}{1} \cdot \frac{2}{7}$   
 $= 6$
12.  $\frac{18}{1} \cdot \frac{2}{9}$   
 $= 4$

**Use the distributive property to simplify.** The first two are done for you.

- (e)  $6 \cdot (\frac{1}{2} + \frac{5}{6})$   
 $6 \cdot (\frac{1}{2}) + 6 \cdot (\frac{5}{6})$   
 $3 + 5$   
 $8$
- (f)  $21 \cdot (\frac{2}{3} - \frac{2}{7})$   
 $21 \cdot (\frac{2}{3}) - 21 \cdot (\frac{2}{7})$   
 $14 - 6$   
 $8$
13.  $36 \cdot (\frac{3}{4} + \frac{1}{9})$   
 $36 \cdot (\frac{3}{4}) + 36 \cdot (\frac{1}{9})$   
 $27 + 16$   
 $43$
14.  $18 \cdot (\frac{1}{6} + \frac{2}{9})$
15.  $14 \cdot (\frac{5}{2} - \frac{2}{7})$
16.  $8 \cdot (\frac{1}{4} - \frac{7}{8})$
17.  $12 \cdot (\frac{-2}{3} + \frac{1}{4})$
18.  $12 \cdot (\frac{-1}{6} - \frac{1}{4})$

**Find the LCD.**

19.  $\frac{1}{2}$  and  $\frac{3}{5}$  and  $\frac{-1}{3}$  and  $\frac{2}{1}$

**Use the distributive property to simplify.**

20.  $30 \cdot (\frac{1}{2} + \frac{3}{5} + \frac{-1}{3} + 2)$   
 $30 \cdot (\frac{1}{2}) + 30 \cdot (\frac{3}{5}) + 30 \cdot (\frac{-1}{3}) + 30 \cdot (2)$   
 $15 + 18 - 10 + 60$   
 $93$