Topic 10 - Adding and Subtracting Fractions

Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Thom began building a chair last week. He built $\frac{5}{16}$ of the chair during the weekdays, and $\frac{7}{16}$ on the weekend. Which of the following can be used to find how much of the chair he has built?
   a. Write $\frac{16 + 16}{5 + 7}$ to get $\frac{32}{12}$. Simplify to $\frac{8}{3}$.
   b. Write $\frac{5 + 7 + 16}{16}$ to get $\frac{28}{16}$. Simplify to $1\frac{3}{4}$.
   c. Write $\frac{5 + 7}{16}$ to get $\frac{12}{16}$. Simplify to $\frac{3}{4}$.
   d. Write $\frac{5 + 7}{16 + 16}$ to get $\frac{12}{32}$. Simplify to $\frac{3}{8}$.

2. What fraction is equal to $\frac{14}{15} - \frac{4}{15}$?
   a. $\frac{6}{5}$
   b. $\frac{3}{5}$
   c. $\frac{10}{0}$
   d. $\frac{2}{3}$

3. Which of the following pairs of numbers have a least common multiple of 45?
   a. 3 and 15  b. 45 and 90  c. 5 and 9  d. 3 and 12

4. The table shows the different packages of toothpaste available at a store. Bert buys cartons of Orange Cheer and Apple Smile toothpaste. What is the least number of cartons that Bert could buy so that they will have the same number of each flavor of toothpaste?

<table>
<thead>
<tr>
<th>Item</th>
<th>Cartons in Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange Cheer</td>
<td>8</td>
</tr>
<tr>
<td>Great Grape</td>
<td>10</td>
</tr>
<tr>
<td>Apple Smile</td>
<td>6</td>
</tr>
</tbody>
</table>

   a. 480 cartons  b. 48 cartons  c. 24 cartons  d. 16 cartons

5. Carson brought $\frac{7}{8}$ pounds of cans in for recycling. Last week, he recycled $\frac{5}{6}$ pounds of cans. How many more pounds of cans did Carson bring in this week than last week?
   a. $\frac{1}{12}$ pound  b. $\frac{1}{24}$ pound  c. $\frac{1}{48}$ pound  d. $\frac{1}{7}$ pound
6. Marta is making two different recipes for nut bread. One recipe calls for \( \frac{1}{8} \) cup of nuts. The other recipe calls for \( \frac{3}{4} \) cup of nuts. How many cups of nuts will Marta need in all?

a. \( \frac{7}{8} \) cup   b. \( \frac{1}{8} \) cups   c. \( \frac{15}{16} \) cup   d. \( \frac{5}{8} \) cup

7. Kandice notices that \( \frac{2}{7} \) of a gallon of milk is on the top shelf of the refrigerator, and \( \frac{3}{5} \) of a gallon of milk is on the bottom shelf. How much milk is in the refrigerator in all?

a. \( \frac{67}{70} \) gallon   b. \( \frac{31}{35} \) gallon   c. \( \frac{5}{7} \) gallon   d. \( \frac{11}{35} \) gallon

8. While warming up for a track meet, Roslyn jogged for \( \frac{17}{20} \) of a mile. Maureen jogged for \( \frac{3}{5} \) of a mile. How much farther did Roslyn jog?

a. \( \frac{1}{4} \) mile   b. \( \frac{14}{20} \) mile   c. \( \frac{3}{20} \) mile   d. \( \frac{3}{40} \) mile

9. How long does it take to drive from Minneapolis to Chicago through Green Bay?

<table>
<thead>
<tr>
<th>Route</th>
<th>Hours to Travel by Car</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis to Green Bay</td>
<td>( 4 \frac{5}{6} ) hours</td>
</tr>
<tr>
<td>Green Bay to Chicago</td>
<td>( 3 \frac{2}{3} ) hours</td>
</tr>
</tbody>
</table>

a. \( 1 \frac{1}{6} \) hours   b. \( 7 \frac{7}{16} \) hours   c. \( 8 \frac{1}{2} \) hours   d. \( 8 \frac{2}{3} \) hours

10. What is \( 3 \frac{1}{4} + 4 \frac{1}{3} \)?

a. \( 7 \frac{5}{6} \)   b. \( 7 \frac{1}{2} \)   c. \( 7 \frac{7}{12} \)   d. \( 7 \frac{4}{7} \)

11. Carson has only $20 bills and $10 bills in her wallet. The total value of the bills is $50. She has 1 more $20 bill than $10 bills. How many of each kind of bill does Carson have?
a. one $20 bill and two $10 bills  

b. two $20 bills and one $10 bill  
c. one $20 bill and three $10 bills  
d. two $20 bills and two $10 bills

12. Peach drank \( \frac{1}{8} \) of a gallon of orange juice on Monday and \( \frac{3}{8} \) of a gallon of orange juice on Tuesday. Which of the following can be used to find how much orange juice she drank?

a. Write \( \frac{1+3}{8} \) to get \( \frac{4}{8} \). Simplify to \( \frac{1}{2} \).  
b. Write \( \frac{1+8}{3+8} \) to get \( \frac{9}{11} \).  
c. Write \( \frac{1+3}{8+8} \) to get \( \frac{4}{16} \). Simplify to \( \frac{1}{4} \).  
d. Write \( \frac{1+3}{8-8} \) to get \( \frac{4}{0} \).

13. What is \( \frac{11}{12} - \frac{5}{12} \)?

a. \( \frac{3}{4} \)  
b. \( \frac{1}{2} \)  
c. \( \frac{2}{3} \)  
d. \( \frac{6}{0} \)

14. Which of the following pairs of numbers have a least common multiple of 56?

a. 2 and 28  
b. 7 and 8  
c. 4 and 14  
d. 3 and 17

15. Rory uploaded \( \frac{1}{5} \) of the files in his folder to his website before lunch, and another \( \frac{3}{7} \) after lunch. How much more of the files in his folder were uploaded after lunch than before lunch?

a. \( \frac{22}{35} \)  
b. \( \frac{11}{35} \)  
c. \( \frac{8}{35} \)  
d. \( \frac{2}{2} \)

16. Alton pours \( \frac{4}{5} \) of a cup of milk into a measuring cup for a recipe. How much milk will Alton have left in the measuring cup after he pours \( \frac{1}{4} \) cup of milk into the mixing bowl?

a. \( \frac{11}{20} \) cup  
b. \( \frac{1}{10} \) cup  
c. \( \frac{3}{10} \) cup  
d. \( \frac{1}{5} \) cup

17. What is \( 2 \frac{2}{9} + 2 \frac{1}{2} \)?

a. \( \frac{3}{11} \)  
b. \( \frac{2}{3} \)  
c. \( \frac{13}{18} \)  
d. \( \frac{7}{9} \)
18. Fernando’s report is $2 \frac{5}{8}$ pages long. Monique’s report is $1 \frac{7}{8}$ pages long. How many more pages does Fernando’s report have than Monique’s?
   a. $\frac{3}{4}$ page  b. $\frac{3}{8}$ page  c. $1 \frac{3}{8}$ pages  d. $1 \frac{3}{4}$ pages

19. Chad’s older brother is $5 \frac{1}{3}$ feet tall. Chad’s younger brother is $2 \frac{2}{3}$ feet tall. How much taller is Chad’s older brother than his younger brother?
   a. $2 \frac{1}{6}$ feet  b. $2 \frac{2}{3}$ feet  c. $3 \frac{1}{6}$ feet  d. $3 \frac{1}{3}$ feet

20. Lionel is walking to his best friend’s house, which is $5 \frac{1}{3}$ blocks away. So far, he has walked $2 \frac{5}{6}$ blocks. How many more blocks does he need to walk?
   a. $2 \frac{2}{3}$ blocks  b. $2 \frac{1}{2}$ blocks  c. $3 \frac{1}{3}$ blocks  d. $3 \frac{1}{6}$ blocks