

## **Chapter 2 & 3 Unit Test - Fractions**

Name \_\_\_\_\_ Section \_\_\_\_\_

**Be sure to show all your work and circle your answer.**

- 1) In a recent taste test, 85 people preferred Coke-a-Cola while 105 preferred Pepsi. What fraction of the people surveyed preferred Coke-a-Cola?
- 2) Identify which fractions are a) proper fractions, b) improper fractions, and c) mixed numbers from the following list:  
 $\frac{19}{9}$ ,  $7\frac{3}{10}$ ,  $\frac{8}{15}$ ,  $8\frac{2}{13}$ ,  $\frac{6}{6}$ ,  $\frac{1}{2}$
- 3) Round each mixed number to the nearest whole number:  
a)  $6\frac{2}{3}$                       b)  $3\frac{2}{13}$                       c)  $9\frac{1}{2}$
- 4) Find the product of  $8\frac{1}{7}$  and  $\frac{77}{9}$ .
- 5) Find the sum of  $6\frac{5}{12}$  and  $5\frac{3}{8}$ .
- 6) Find the quotient of  $11\frac{2}{3}$  and  $3\frac{4}{15}$ .
- 7) The difference of  $7\frac{2}{9}$  and  $3\frac{13}{21}$ .
- 8) Find  $1 \div \frac{13}{18}$
- 9a) Find  $0 \div 15\frac{3}{7}$ .
- 9b) Find  $8\frac{3}{4} \div 0$ .
- 10) Write  $\frac{159}{13}$  as a mixed number.
- 11) Write  $7\frac{3}{11}$  as an improper fraction
- 12) Find  $15 - 6\frac{5}{12}$

13) Evaluate:  $\frac{8}{3} \left( \frac{11}{16} - \frac{1}{2} \right)^2 - \frac{15}{64} \cdot \frac{1}{3} \div 5(4)$

14) Evaluate:  $\left\{ 5\frac{5}{6} \cdot \frac{3}{20} \cdot 4 - \frac{5}{8} \right\}^2 - 2\frac{3}{16}$

15) Evaluate:  $\left( 6\frac{3}{5} \right) \cdot 0 \cdot \left( 5\frac{9}{14} \right) + \frac{\frac{42}{17}}{\frac{9}{34}}$

16) During the summer of 2006,  $\frac{5}{7}$  of the people surveyed supported raising the federal minimum wage. If a total of 182 were surveyed, how many people supported raising the federal minimum wage?

17) During a three day weekend, Don Barker spent a total  $31\frac{5}{6}$  hours working on a project. If he spent 9 hours on Saturday and  $10\frac{9}{10}$  hours on Monday, how many hours did he spend on the project on Sunday?


18) On Friday, Mathias wrote  $\frac{1}{3}$  of his paper that was due Monday. On Saturday, he wrote another  $\frac{3}{5}$  of his paper. If he finished his paper on Sunday and it was thirty pages long, how many pages did he write on Sunday?























19) Find and correct the error: Find  $\frac{3}{8} + \frac{5}{12}$ .

Solution:

$$\frac{3}{8} + \frac{5}{12} = \frac{8}{20} = \frac{4 \cdot 2}{4 \cdot 5} = \frac{2}{5}$$

20) Number of payments received by Sacme Corporation

( = 20 payments)

Day	Number of payments
Mon.	  
Tue.	   
Wed.	     
Thu.	   
Fri.	    

- What fraction of the payments received during the entire week were received on Wednesday?
- If the total value of the payments received during the week was \$2856, what was the value of the payments received on Wednesday?

**Answer Key:**

- 1)  $\frac{17}{38}$  2a)  $\frac{8}{15}, \frac{1}{2}$  2b)  $\frac{19}{9}, \frac{6}{6}$  2c)  $7\frac{3}{10}, 8\frac{2}{13}$  3a) 7  
 3b) 3 3c) 10 4)  $69\frac{2}{3}$  5)  $11\frac{19}{24}$  6)  $3\frac{4}{7}$  7)  $3\frac{38}{63}$   
 8)  $1\frac{5}{13}$  9a) 0 9b) undefined 10)  $12\frac{3}{13}$  11)  $\frac{80}{11}$   
 12)  $8\frac{7}{12}$  13)  $\frac{1}{32}$  14)  $6\frac{5}{64}$  15)  $9\frac{1}{3}$  16) 130 people  
 17)  $11\frac{14}{15}$  hours 18) 2 pages 19)  $\frac{19}{24}$  20a)  $\frac{2}{7}$  20b) \$816