Basic Mathematics

1. Add the following:
   
   \[16.23 + 13.706\]
   
   \[
   \underline{\hphantom{16.23}} + \underline{\hphantom{13.706}}
   \]
   
   \[
   \underline{29.936}
   \]

2. Subtract the following:
   
   \[2.012 - 0.963\]
   
   \[
   \underline{\hphantom{2.012}} - \underline{\hphantom{0.963}}
   \]
   
   \[
   \underline{1.049}
   \]

3. Multiply the following:
   
   \[1.45 \times 0.0016\]
   
   \[
   \underline{\hphantom{1.45} \times \hphantom{0.0016}}
   \]
   
   \[
   \underline{0.00232}
   \]

4. Divide and display to the third decimal place:
   
   \[7.14 \div 14.304\]
   
   \[
   \underline{\hphantom{7.14} \div \hphantom{14.304}}
   \]
   
   \[
   \underline{0.501}
   \]

5. Write the following as decimals:
   
   forty seven thousands
   
   \[
   \underline{47,000}
   \]

6. Change the following decimal to a fraction and reduce:
   
   \[0.614\]
   
   \[
   \underline{\hphantom{0.614}} \div \underline{\hphantom{.614}}
   \]
   
   \[
   \underline{\frac{307}{500}}
   \]

7. Change the following to a decimal:
   
   \[
   \underline{\frac{50}{200}}
   \]
   
   \[
   \underline{\hphantom{\frac{50}{200}}}
   \]
   
   \[
   \underline{0.25}
   \]
8. Write 17% as a fraction:


9. Change the following to a whole or mixed number:
\[
\frac{36}{7}
\]


10. Change the following into an improper fraction:
\[
9 \frac{1}{2}
\]


11. Find the lowest common denominator (bottom number) in the following:
\[
\frac{2}{5} \text{ and } \frac{5}{9}
\]


12. Add the following:
\[
1 \frac{1}{2} + 3 \frac{1}{8} + 2 \frac{1}{6}
\]


13. Subtract the following:
\[
8 \frac{1}{4} - 3 \frac{3}{8}
\]


14. Multiple the following and reduce to lowest terms:
\[
\frac{2}{8} \times 1 \frac{1}{3}
\]
15. Divide the following and reduce to lowest terms:

\[ 1 \frac{1}{8} \div 2 \frac{1}{2} \]

16. Reduce the following fraction to the lowest term:

\[ \frac{4}{19} \]

17. Calculate the following percent:

15% of 63

18. Change the following to a ratio expression:

2.5%

19. The top number in a fraction is called the denominator.

True
False

20. A proper fraction can be converted to a mixed number.

True
False

21. A number such as 1¼ is a decimal number.

True
False
22. Four parts per $10,000 = 0.04\%$

   True
   False

23. Multiply 0.0258 by 10, and round off to two decimal places.

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24. Which of the following are factors of 48?

   2
   3
   5
   7
   4
   12

25. Change the fraction $\frac{31}{40}$ to its exact decimal equivalent.

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Answer Key to Mathematics: Quiz 4

Q01 16.23 + 13.706 = 29.936
Q02 2.012 - 0.963 = 1.049
Q03 1.45 x 0.0016 = 0.00232 or .00232
Q04 7.14 ÷ 14.304 = 0.499 or .499
Q05 47/1000 = 0.047 or .047
Q06 614/1000 = 307/500
Q07 50 ÷ 200 = 0.25 or .25
Q08 17/100
Q09 36 ÷ 7 = 5 1/7
Q10 ((9 x 2) + 1)/2 = 19/2
Q11 5 x 9 = 45
Q12 1 12/24 + 3 3/24 + 2 4/24 = 6 19/24
Q13 8 ¼ = 8 2/8 = 66/8 - 27/8 = 39/8 = 4 7/8
Q14 1 1/3 = 4/3; (2 x 4) / (8 x 3) = 8/24 or 1/3
Q15 1 1/8 = 9/8; 2 ½ = 5/2; 9/8 x 2/5 = 18/40 = 9/20
Q16 4 and 19 do not have a common factor; therefore 4/19 is the lowest term
Q17 (15 x 63) ÷ 100 = 9.45
Q18 2.5/100 = 25/1000 = 1/40 = 1:40
Q19 False. The top number in a fraction is the numerator and the bottom number is the denominator.
Q20 False. An improper fraction can be converted to a mixed number, e.g., 5/3 = 1 2/3
Q21 False. This is a mixed number; the decimal version would be 1.25
Q22 True. 0.04% = 0.04 parts per 100 = 4 parts per 10,000
Q23 0.0258 x 10 = 0.258 = 0.26 or .26
Q24 2, 3, 4 and 12 are factors of 48; all can be divided without any remainders.
Q25 31 ÷ 49 = 0.775 or .775