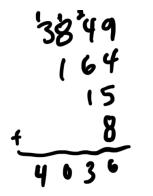
Final

Make sure to show your work, including all intermediary steps. 1.8 + 15 + 164 + 3,849



A: 4,036

2.55,347 + 6,810 + 354 + 87 + 9

A: 62,607

3. 5,431 - 683 - 254 - 31 - 4

A: 4,459

4. 6845 - 597 - 328 - 48 - 12

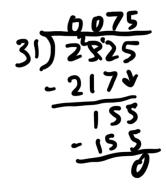
A: 5,860



A: 145, 665

6. 6,234 x 75

A: 467,550



A: 75

8. 12870 ÷ 198

A:65

- 9. What fraction is depicted in the following graph: Unknown?
- 10. What fraction is depicted in the following graph: Unknown?
- 11. Reduce to its lowest terms: 6/117

$$\frac{6}{1/7}$$
 $\frac{2}{17}$ $\frac{2}{39}$

A: 39

13. Raise to a higher term to match the given denominator: $\frac{3}{4} = \frac{x}{68}$

$$\frac{3}{4} = \frac{x}{68} \quad x=51 \qquad A: \frac{51}{68}$$

$$\frac{68}{4} = 17 \quad 17.3 = 51$$

14. Raise to a higher term to match the given denominator: 7/8 = x/456

$$\frac{7}{8} = \frac{x}{456} \qquad x = 399 \qquad A: \frac{399}{456}$$

$$\frac{456}{8} = 57 \qquad 57x7 = 399$$

15. Find the lowest common denominator: 1/5 and 6/103

$$\frac{1}{5} \text{ and } \frac{b}{103} \Rightarrow \frac{103}{515} \text{ and } \frac{30}{515}$$

$$LCD(5, (63): 515)$$

16. Find the lowest common denominator: 3/7 and 2/251

$$\frac{3}{7}$$
 and $\frac{2}{251} \Rightarrow \frac{753}{1757}$ and $\frac{14}{1757}$
LCO(7,251)= 1757

17. 1/3 + 15/24 =

$$\frac{1}{3} + \frac{15}{24} \Rightarrow \frac{8}{24} + \frac{15}{24} = \frac{8715}{24} = \frac{23}{24}$$

$$LCD(3,24) = 24 \qquad \frac{15}{23} \qquad A : \frac{23}{24}$$

$$\frac{2}{7} + \frac{35}{87} = \frac{174}{609} + \frac{145}{609} = \frac{174 + 245}{609} = \frac{419}{609}$$

$$LCO(7,87) = 609 + \frac{245}{419}$$

19. 8/9 - 10/115 =

$$\frac{8}{9} - \frac{10}{115} = \frac{9}{9} - \frac{2}{23} = \frac{184}{207} - \frac{18}{207} = \frac{184 - 18}{207} = \frac{166}{207}$$

$$LCD(9,23) = 207 \qquad \frac{184}{166} \qquad A: \frac{166}{207}$$

20. 45/117 – 1/3 =

$$\frac{45}{117} - \frac{1}{3} = \frac{15}{39} - \frac{1}{3} = \frac{15}{39} - \frac{13}{39} = \frac{15 - 13}{39} = \frac{2}{39}$$

$$LCO(3,39) = 39$$

$$A: \frac{2}{39}$$

21. $3/5 \times 4/8 =$

$$\frac{3}{5} \times \frac{4}{8} = \frac{3 \times 4}{5 \times 8} = \frac{12}{40 \div 4} = \frac{3}{10} \quad A : \frac{3}{10}$$

$$\frac{121}{350} \times \frac{29}{31} = \frac{121 \times 29}{350 \times 31} = \frac{3509}{10850}$$

23. $7/8 \div \frac{1}{4} =$

$$\frac{7}{8} : \frac{1}{4} \Rightarrow \frac{7}{8} \times \frac{4}{1} = \frac{7 \times 4}{8} = \frac{28 \div 4}{8 \div 4} \frac{7}{2} \quad A : \frac{7}{2}$$

24. $9/11 \div 2/113 =$

$$\frac{9}{11} \div \frac{2}{113} \Rightarrow \frac{9}{11} \times \frac{113}{2} = \frac{9 \times 113}{11 \times 2} = \frac{1017}{22}$$

$$\frac{113}{\times 9}$$
 $\frac{11}{22}$

26. 5.87 + 6.391 =

A: 12.261

27. 7.29 - 6.11 =

28. 964.21 - 156.374 =

$$\begin{array}{c}
35.1 & (1) \\
\times 6.81 & (2) \\
\hline
28680 \\
+216600
\end{array}$$
A:239.031

30. 97.11368 x 45.312 =

31. 96.154 \div 3.12 = (You only need to calculate the answer to five positions after the decimal point.)

32. $53.215 \div 5.2534 =$ (You only need to calculate the answer to five positions after the decimal point.)

33. 10% of 30 =

$$30 \times 10^{10} \Rightarrow \frac{30 \times 10}{100} = \frac{300}{100} = \frac{3}{1} : 3 \text{ A}: 3$$

$$450 \times 23 = \frac{450 \times 23}{100} = \frac{10350}{100} = 103.50$$

$$450 \times \frac{27}{1350} = \frac{10350}{100} = 103.50$$

$$\frac{1}{10350} = \frac{10350}{100} = 103.50$$

35. 15 is what percent of 320? (Round to two positions after the decimal point)

$$\frac{15}{15} = \frac{15 \times 100}{320} = \frac{1500 \div 20}{320 \div 20} = \frac{75}{16} = 4.68$$
of (00)

A: 4.68%

36. 21 is what percent of 561? (Round to two positions after the decimal point)

$$\begin{array}{c}
21 \\
\text{is } \% \\
\text{of } (00)
\end{array}$$

$$\begin{array}{c}
\frac{21 \times 100}{561} = \frac{2100 \div ?}{561 \div 7} \frac{700}{187} = 3.74 \\
\hline
561
\end{array}$$

$$\begin{array}{c}
003.74 \\
-561 \\
\hline
1309 \\
-1309 \\
\hline
-748 \\
\hline
-748
\end{array}$$

37. 30 is 15% or what number?

$$\frac{30}{15} = \frac{30 \times 100}{15} = \frac{3000}{15} = \frac{200}{1} = 200$$
of 100

38. 324.8 is 28 percent of what number?

39. $104 - 3 \times 8 + 15 \div 3 =$

$$x=104-3 \times 8+15 \div 3$$
 $x=104-24+5$
 $x=80+5$
 $x=85$

40. $(165 + 23) - 2 \times 18 + 63 \div 9 =$

$$x = (165+23)-2 \times 18+63 \div 9$$

 $x = (188)-2 \times 18+63 \div 9$
 $x = 188-36+7$
 $x = 152+7$
 $x = 159$
 $A:159$