LONG DIVISION WITH DECIMALS - A

ANSWERS - PAGE 1

HELPFUL EXAMPLE $4\overline{)65}$

SOMETIMES YOU NEED TO ADD MORE THAN ONE ZERO.

$$\begin{array}{r} 16 \\ 4\overline{)65} \\ -\,4\downarrow \\ \hline 25 \\ -\,24 \\ \hline 01 \end{array} \Rightarrow \begin{array}{r} 16. \\ 4\overline{)65.} \\ -\,4 \\ \hline 25 \\ -\,24 \\ \hline 01 \end{array} \Rightarrow \begin{array}{r} 16. \\ 4\overline{)65.0} \\ -\,4 \\ \hline 25 \\ -\,24\downarrow \\ \hline 01\,0 \end{array} \Rightarrow \begin{array}{r} 16.2 \\ 4\overline{)65.0} \\ -\,4 \\ \hline 25 \\ -\,24 \\ \hline 1\,0 \\ -\,0\,8 \\ \hline 0\,2 \end{array} \Rightarrow \begin{array}{r} 16.2 \\ 4\overline{)65.00} \\ -\,4 \\ \hline 25 \\ -\,24 \\ \hline 1\,0 \\ -\,0\,8\downarrow \\ \hline 0\,20 \end{array} \Rightarrow \begin{array}{r} 16.25 \\ 4\overline{)65.00} \\ -\,4 \\ \hline 25 \\ -\,24 \\ \hline 1\,0 \\ -\,0\,8 \\ \hline 20 \\ -\,20 \\ \hline 00 \end{array}$$

16.25 x 4 = 65.00

WHEN YOU FINISH DIVIDING YOU STILL HAVE **1** LEFT. ADD A DECIMAL TO THE ORIGINAL PROBLEM, SO YOU CAN START ADDING **0**'s.

BUT ONE ZERO IS NOT ENOUGH. YOU HAVE TO ADD ANOTHER TO FINISH THE PROBLEM.

DIVIDE.

1. $4\overline{)37}$ — 9.250
2. $2\overline{)89}$ — 44.500
3. $8\overline{)91}$ — 11.375
4. $3\overline{)78}$ — 26.000
5. $6\overline{)93}$ — 15.500
6. $4\overline{)85}$ — 21.250
7. $5\overline{)99}$ — 19.8
8. $8\overline{)78}$ — 9.75
9. $4\overline{)92}$ — 23
10. $2\overline{)67}$ — 33.5
11. $4\overline{)79}$ — 19.75
12. $8\overline{)95}$ — 11.875
13. $4\overline{)9.90}$ — 2.475
14. $5\overline{)91.60}$ — 18.32
15. $3\overline{)612}$ — 204
16. $2\overline{)0.139}$ — 0.0695
17. $8\overline{)0.032}$ — 0.004
18. $9\overline{)43.2}$ — 4.8
19. $8\overline{)3.25}$ — 0.40625
20. $5\overline{)4.71}$ — 0.942
21. $7\overline{)0.56}$ — 0.08
22. $4\overline{)379}$ — 94.75

LONG DIVISION WITH DECIMALS - B

ANSWERS - PAGE 2

HELPFUL EXAMPLE $11\overline{)2.4}$

SOMETIMES YOU CAN'T ADD ENOUGH ZEROS.

$$\begin{array}{r} 0.2 \\ 11\overline{)2.4} \\ -\,0\downarrow \\ \hline 2\,4 \\ -\,2\,2 \\ \hline 0\,2 \end{array} \Rightarrow \begin{array}{r} 0.2 \\ 11\overline{)2.40} \\ -\,0 \\ \hline 2\,4 \\ -\,2\,2\downarrow \\ \hline 0\,20 \end{array} \Rightarrow \begin{array}{r} 0.21 \\ 11\overline{)2.40} \\ -\,0 \\ \hline 2\,4 \\ -\,2\,2 \\ \hline 20 \\ -\,11 \\ \hline 09 \end{array} \Rightarrow \begin{array}{r} 0.218 \\ 11\overline{)2.400} \\ -\,0 \\ \hline 2\,4 \\ -\,2\,2 \\ \hline 20 \\ -\,11\downarrow \\ \hline 90 \\ -\,88 \\ \hline 02 \end{array} \Rightarrow \begin{array}{r} 0.2181 \\ 11\overline{)2.4000} \\ -\,0 \\ \hline 2\,4 \\ -\,2\,2 \\ \hline 20 \\ -\,11 \\ \hline 90 \\ -\,88 \\ \hline 20 \\ -\,11 \\ \hline 09 \end{array}$$

IT WILL REPEAT THE SAME NUMBERS OVER AND OVER (.21818181818…). THIS IS CALLED A REPEATER.

YOU WRITE THE ANSWER LIKE THIS: $0.2\overline{18}$

THE BAR (LINE) GOES OVER THE NUMBERS THAT REPEAT.

WHEN YOU FINISH DIVIDING YOU STILL HAVE **2** LEFT. YOU WILL NEED TO START ADDING **0**'s.

THIS PROBLEM WILL GO FOREVER AND EVER AND NEVER STOP.

DIVIDE.
USE REPEATER BAR WHEN NEEDED.

1. $3\overline{)50}$ — $16.66\overline{6}$
2. $4\overline{)92}$ — 23
3. $9\overline{)95}$ — $10.55\overline{5}$
4. $8\overline{)38}$ — 4.75
5. $4\overline{)89}$ — 22.25
6. $6\overline{)71}$ — $11.83\overline{3}$
7. $12\overline{)49}$ — $4.083\overline{3}$
8. $11\overline{)80}$ — $7.27\overline{27}$
9. $10\overline{)54}$ — 5.4
10. $2\overline{)84}$ — 42
11. $13\overline{)99}$ — $7.6\overline{154}$ (7.615384615384)
12. $9\overline{).37}$ — $0.041\overline{1}$
13. $5\overline{)6.6}$ — 1.32
14. $6\overline{)0.246}$ — 0.041
15. $2\overline{)45.3}$ — 22.65
16. $3\overline{)7.40}$ — $2.46\overline{6}$
17. $4\overline{)123}$ — 30.75
18. $10\overline{)3.47}$ — 0.347
19. $15\overline{)306}$ — 20.4
20. $12\overline{)56.7}$ — 4.725
21. $11\overline{)24.5}$ — $2.22\overline{27}$
22. $13\overline{)0.12}$ — $0.00\overline{9231}$ (0.00923076923076)