

LONG DIVISION

Terms:

Dividend: the number being divided.

Divisor: the number you are dividing by.

Quotient: the answer to a division problem.

Remainder: what is left over when the division problem is completed; if you computed $58 \div 7$, you would have a quotient of 8 with a remainder of 2 which could be written as either "8 R2" or "8 and 2/7."

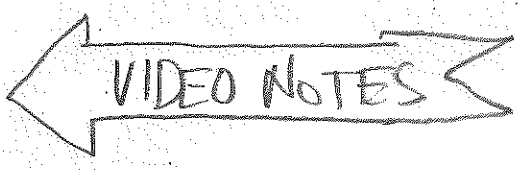
Ducks Must Swim Backwards

To complete a long division problem, follow these steps:

- ① 1. Divide
- ② 2. Multiply
- ③ 3. Subtract
- ④ 4. Compare
- ⑤ 5. Bring Down

Thinking Step

- | |
|--------------|
| ① Divide? |
| ② Multiply |
| ③ Subtract |
| ④ Bring Down |



Example: $358 \div 21 = a$ ("a" is called a variable, and indicates you do not, at this time, know what the answer is.)

$$\begin{array}{r}
 17 \\
 21 \overline{) 358} \\
 \underline{- 21 } \\
 148 \\
 \underline{- 147} \\
 1
 \end{array}$$

- D 1. **Divide:** how many times does 21 go into 3? (0) how many times does 21 go into 35? (1)
- M 2. **Multiply:** $21 \times 1 = 21$. Record.
- S 3. **Subtract:** $35 - 21 = 14$.
- 4. **Compare:** is 14 less than 35? If so, continue; if not, make correction in the divide and/or multiply steps.
- B 5. **Bring Down:** bring down the "8."
- D 6. **Divide:** How many times does 21 go into 148? (7)
- M 7. **Multiply:** $21 \times 7 = 147$. Record.
- S 8. **Subtract:** $148 - 147 = 1$.
- 9. **Compare:** Is 1 less than 21? Yes
- 10. **Quotient:** 17 R1 or 17 1/21.

No's
DONE!!!

Name

Lily Magennis
= AWESOME

A Key

Period A

10
10

Long Division Practice

Mr. Millard

+ B
W

$$\begin{array}{r} 58 \\ 74 \overline{) 111} \\ \underline{39} \\ 72 \\ \underline{56} \\ 16 \end{array}$$

$$\begin{array}{r} 19 \\ 239 \overline{) 4} \\ \underline{21} \\ 19 \\ \underline{18} \\ 14 \\ \underline{14} \\ 0 \end{array}$$

$$\begin{array}{r} 23 \\ 92 \overline{) 11} \\ \underline{18} \\ 31 \\ \underline{27} \\ 4 \end{array}$$

$$\begin{array}{r} 857 \\ 185 \overline{) 7} \\ \underline{81} \\ 10 \\ \underline{90} \\ 10 \\ \underline{90} \\ 10 \\ \underline{90} \\ 10 \end{array}$$

$$\begin{array}{r} 57 \\ 81459 \\ \underline{40} \\ 59 \\ \underline{36} \\ 23 \end{array}$$

$$\begin{array}{r} 144 \\ 61867 \\ \underline{6} \\ 26 \\ \underline{24} \\ 27 \\ \underline{24} \\ 3 \end{array}$$

$$\begin{array}{r} 326 \\ 31961 \\ \underline{9} \\ 06 \\ \underline{6} \\ 01 \\ \underline{0} \\ 1 \end{array}$$

$$\begin{array}{r} 209 \\ 4836 \\ \underline{8} \\ 03 \\ \underline{0} \\ 36 \\ \underline{36} \\ 0 \end{array}$$

$$\begin{array}{r} 40 \\ 5200 \\ \underline{20} \\ 000 \\ \underline{0} \\ 000 \\ \underline{0} \\ 000 \end{array}$$

$$\begin{array}{r} 110 \\ 6665 \\ \underline{6} \\ 06 \\ \underline{6} \\ 05 \\ \underline{0} \\ 5 \end{array}$$

~~BONUS~~

$$\begin{array}{r} 2014 \\ 425856031 \\ \underline{850} \\ 60 \\ \underline{0} \\ 603 \\ \underline{425} \\ 178 \\ \underline{1700} \\ 81 \end{array}$$