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 ÷ 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."

To complete a long division problem, follow these steps:

- 1. Divide
- 2. Multiply
- 3. Subtract
- 4. Compare
- 5. 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.)

- 1. Divide: how many times does 21 go into 3? (0) how many times does 21 go into 35? (1)
- 2. Multiply: 21 x 1 = 21. Record.
- 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.
- 5. Bring Down: bring down the "8."
- 6. Divide: How many times does 21 go into 148? (7)
- 7. Multiply: $21 \times 7 = 147$. Record.
- 8. Subtract: 148 147 = 1.
- 9. Compare: Is 1 less than 21? Yes.
- 10. Quotient: 17 Rl or 17 1/21.

