

DIVISION STRATEGIES

LONG DIVISION

DIVIDE . DAD 

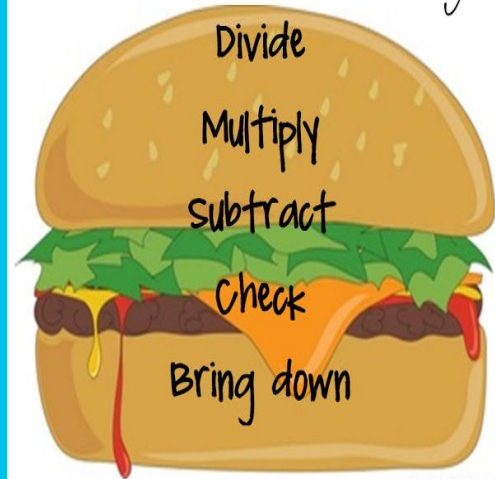
MULTIPLY . MOM 

SUBTRACT . SISTER 

BRING DOWN . BROTHER 

REPEAT/REMAINDER . ROVER 

Does McDonald's serve Cheese Burgers?



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D- DOES
M- MR.
S- SAMPSON
B- BARK ?



Partial Quotients- Single Digit Divisors

$$\begin{array}{r}
 6 \overline{) 258} \\
 - 120 \quad 20 \\
 \hline
 138 \\
 - 120 \quad 20 \\
 \hline
 18 \\
 - 18 \quad 3 \\
 \hline
 0
 \end{array}$$

(43)

Long Division- Single Digit Divisors

Divide: $3 \overline{) 75}$ 3 goes into 7 2 times... with some extra!

Multiply: $3 \overline{) 75}$ $2 \times 3 = 6$

Subtract: $3 \overline{) 75}$ -6

Bring Down: $3 \overline{) 75}$ -6 ↓ 15

Repeat: $3 \overline{) 75}$ $15 \div 3 = 5$
 -6 $5 \times 3 = 15$
 -15
0

DOUBLE-DIGIT DIVISORS- USE ESTIMATION TO HELP YOU!!

Partial Quotients

$$\begin{array}{r}
 21 \overline{) 2772} \\
 - 2100 \quad 100 \\
 \hline
 672 \\
 - 630 \quad 30 \\
 \hline
 42 \\
 - 42 \quad 2 \\
 \hline
 0
 \end{array}$$

(132)

Long Division

how many per store? → **3,524 R 6**

$$\begin{array}{r}
 24 \overline{) 85,582} \\
 \underline{72} \\
 125 \\
 \underline{120} \\
 58 \\
 \underline{48} \\
 102 \\
 \underline{96} \\
 6
 \end{array}$$

Writing remainders as fractions

divisor = denominator

$$\begin{array}{r}
 023 \frac{1}{6} \\
 6 \overline{) 139} \\
 - 0 \\
 \hline
 13 \\
 - 12 \\
 \hline
 19 \\
 - 18 \\
 \hline
 1
 \end{array}$$

remainder = numerator

Checking Answers with Multiplication

$$\begin{array}{r}
 025 \text{ r } 3 \\
 5 \overline{) 128} \\
 - 0 \\
 \hline
 12 \\
 - 10 \\
 \hline
 28 \\
 - 25 \\
 \hline
 3
 \end{array}$$

$$\begin{array}{r}
 25 \leftarrow \text{Quotient} \\
 \times 5 \leftarrow \text{Divisor} \\
 \hline
 125 \\
 + 3 \leftarrow \text{Remainder} \\
 \hline
 128 \leftarrow \text{Dividend}
 \end{array}$$