

Name \_\_\_\_\_

## Division Example for TI-73

Division—Using the TI-73 APP *Math by Hand* in step-by-step mode to show partial products.

Example:  $382 \div 3 = ?$

$3 \overline{)382}$

[BACK] [NEW] [START]

$\begin{array}{r} 100 \\ 3 \overline{)382} \\ \underline{300} = 3 \times 100 \\ 82 \end{array}$

[BACK] [NEW] [NEXT STEP]

$\begin{array}{r} 120 \\ 3 \overline{)382} \\ \underline{300} = 3 \times 100 \\ 82 \\ \underline{60} = 3 \times 20 \\ 22 \end{array}$

[BACK] [NEW] [NEXT STEP]

$\begin{array}{r} 127R1 \\ \dots 3 \overline{)382} \dots \\ \underline{60} = 3 \times 20 \quad \uparrow \\ 22 \\ \underline{21} = 3 \times 7 \\ 1 \end{array}$

[BACK] [NEW] [REPEAT] [FRAC]

$\begin{array}{r} 127 \quad \text{FRAC} \\ \dots 3 \overline{)382} \dots \\ \underline{60} \uparrow \quad 127 \frac{1}{3} \\ 22 \\ \underline{21} \\ 1 \end{array}$

[BACK] [NEW] [REPEAT] [FRAC]

The application shows that there are 100 groups of 3 in 382, not 1 group of 3 in 3. This helps students who are learning the algorithm for the first time, or who have trouble lining up their writing.

The next step shows that there are 20 groups of 3 in 82.

This step shows that there are 7 groups of 3 in 22. Since the remainder is less than the divisor, the problem is solved.

Finally, to see the relationship between the remainder and the fraction form select **FRAC**.

*Math by Hand* is a free APP (concept application program) for the TI-73 calculator <http://education.ti.com/>