

Divide Decimals by Whole Numbers

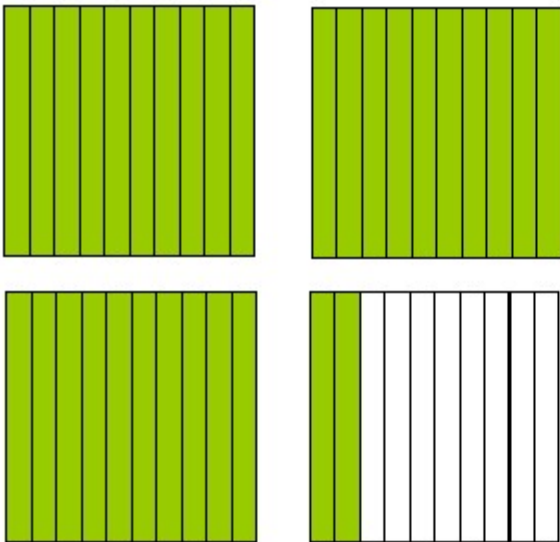
Find $3.2 \div 2$

Estimate. $2 \div 2 = 1$

You can divide by using a model.

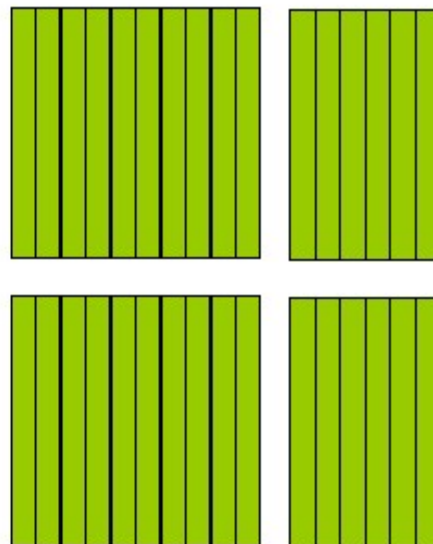
STEP 1

Shade decimal models to show 3.2.



STEP 2

Divide the model into 2 groups of the same size.



To divide a decimal number by a whole number follow the steps listed below

STEP 1

Write the decimal point of the quotient above the decimal point of the dividend.

$$2 \overline{)3.2}$$

STEP 2

Divide as you would divide whole numbers.

$$\begin{array}{r} 1.6 \\ 2 \overline{)3.2} \\ \underline{2} \\ 12 \\ \underline{12} \\ 0 \end{array}$$

So, $3.2 \div 2 = 1.6$

Examples:

A- Divide. Check by multiplying.

$$1)4 \overline{)16.4}$$

$$\begin{array}{r} 4.1 \\ -16 \\ \hline 04 \\ -4 \\ \hline 0 \end{array}$$

$$\rightarrow \begin{array}{r} 4.1 \\ \times 4 \\ \hline 16.4 \end{array}$$

$$2)24 \overline{)55.2}$$

$$\begin{array}{r} 23 \\ -48 \\ \hline 72 \\ -72 \\ \hline 00 \end{array}$$

$$\rightarrow \begin{array}{r} 23 \\ \times 24 \\ \hline 92 \\ +460 \\ \hline 552 \end{array}$$