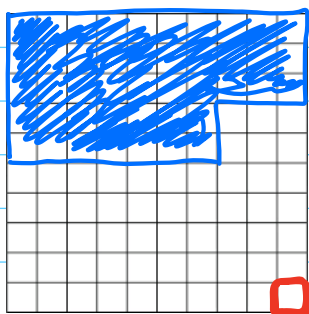# Comparing Fractions, Decimals & Percents

To write a **FRACTION AS A PERCENT** → first, write the fraction w/ a denominator that is a POWER OF 10.

A # that is a PRODUCT of 10
EX: 10, 100, 1000, 10000

← CAN USE A 100's GRID TO REPRESENT ONE WHOLE OR 100%.

ONE SQUARE = $\frac{1}{100}$ OR 1% OR 0.01

A SHADED PART of A 100s CHART CAN BE REPRESENTED
3 WAYS

1 → **PERCENT**   2 → **DECIMAL**   3 → **FRACTION**

44%   0.44 $\frac{44}{100}$

WRITE EACH PERCENT AS A DECIMAL **AND** AS A FRACTION.

7%   0.07 $\frac{7}{100}$ 7¼%   0.0725 $\frac{725}{10,000}$

WRITE EACH FRACTION AS A DECIMAL **AND** AS A PERCENT

5/8 $8\overline{)50}$ = 0.625   5/1000   0.005
           $\underline{-48}$
0.625   20   0.5%
           $\underline{-16}$
             40
62.5% $\underline{-40}$
             0

To CONVERT Any FRACTION to A DECIMAL...
DIVIDE THE NUMERATOR BY THE DENOMINATOR.

$$\frac{3}{7} \quad 7\overline{)3}$$

We can use decimals or percents to compare two test marks when the total marks are different. Liz had 23 1/2 out of 30 on her first math test. She had 31 1/2 out of 40 on her second math test. On which test did Liz do better?

$$\frac{23\frac{1}{2} \, ^{\times 40}}{30 \, _{\times 40}} \qquad \frac{31\frac{1}{2} \, ^{\times 30}}{40 \, _{\times 30}}$$

$78.\overline{3}\% \qquad 78.75\%$

SHE DID BETTER ON THE 2ND TEST.

$$\begin{array}{r} 0.78\overline{3} \\ 30\overline{)23.5} \\ -210 \\ \hline 250 \\ -240 \\ \hline 100 \\ -90 \\ \hline 100 \end{array}$$

$$\begin{array}{r} 0.7875 \\ 40\overline{)31.5} \\ -280 \\ \hline 350 \\ -320 \\ \hline 300 \\ 280 \\ \hline 200 \\ -200 \\ \hline \emptyset \end{array}$$