

Converting Fractions, Decimals, Percents, & models (P.M2-114)

If you are given a . . .

① Percent & Need a . . .

- Fraction, remember: percent means out of 100.

Ex: $80\% = \frac{80}{100}$

- Decimal, move the decimal twice to the left.
- If you can't see the decimal, it's to the right.

Ex: $80.0\% = 80.00\% = 0.80$

$3\% = 0.03$
 $12.5\% = 0.125$
 $125\% = 1.25$

② Decimal and Need a . . .

- Percent, move the decimal twice to the right.

Ex: $0.4 = 40\%$

$0.07 = 7\%$

$0.7381 = 73.81\%$

$1.52 = 152\%$

- Fraction, use place value to determine the denominator:

$0.4 = \frac{4}{10}$ $0.07 = \frac{7}{100}$ $1.521 = 1\frac{521}{1000}$

③ Fraction & Need a Percent

- If the denominator is a factor or multiple of 100, scale up or scale down the fraction to get a denominator of 100.

Ex: $\frac{4 \times 20}{5 \times 20} = \frac{80}{100} = 80\%$

$\frac{60 \div 2}{200 \div 2} = \frac{30}{100} = 30\%$

- If not, divide the numerator by the denominator to determine the decimal and move it twice.

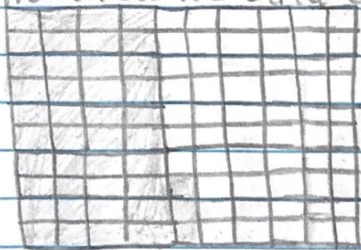
in 3 out 8 = $3 \div 8 = 0.375$

$$\begin{array}{r} 8 \overline{) 3.000} \\ \underline{24} \\ 60 \\ \underline{56} \\ 40 \\ \underline{40} \\ 0 \end{array}$$

$0.375 = 37.5\%$

④ Model and Need all three . . .

- Hundredths Grid Example:



$= \frac{43}{100} = 43\%$

$= 0.43$

- Fraction Models:



$= \frac{1}{3}$

$1 \div 3 = 0.33\bar{3} = 33.\bar{3}\%$



$= \frac{5}{6}$

$5 \div 6 = 0.83\bar{3} =$

$83.\bar{3}\%$

→ Number Lines p. 115 & 121

Use a calculator