



Create an example and explain your method for converting each possible case:

a) fraction to decimal

b) decimal to fraction

c) fraction to percentage

d) percent to fraction

e) decimal to percent

f) percent to decimal

Expressing a fraction as a decimal

$$\frac{3}{4} = 0.75$$

$$\frac{7}{11} = 0.636363\dots$$

Divide the numerator by the denominator.

Expressing a decimal as a percent

$$0.08 = 0.08 \times 100\% = 8\%$$

$$0.345 = 0.345 \times 100\% = 34.5\%$$

$$6.7 = 6.7 \times 100\% = 670\%$$

Multiply by 100%.

Expressing a percent as a decimal

$$68\% = 68 \div 100 = 0.68$$

$$128\% = 128 \div 100 = 1.28$$

Divide by 100

Expressing a decimal as a fraction

$$0.18 = \frac{18}{100} = \frac{9}{50}$$

$$0.0124 = \frac{124}{10000} = \frac{31}{2500}$$

$$2.464 = \frac{2464}{1000} = \frac{308}{125}$$

*Express as a fraction with denominator 10 or 100 or 1000 etc. so that the number of zeros in the denominator matches the number of digits to the **right** of the decimal point in the decimal number.*

Next, reduce the fraction to lowest terms.

Finding the percent of a number

$$18\% \text{ of } 50 = 0.18 \times 50 = 9$$

$$4.5\% \text{ of } 78 = 0.045 \times 78 = 3.51$$

$$120\% \text{ of } 17 = 1.2 \times 17 = 20.4$$

Express percent as a decimal number and multiply by the number.

Fill in the missing information in the chart.

Reduced Fraction	Decimal	Percent
		12%
		7%
		275%
	0.38	
	0.057	
$\frac{3}{8}$		
$\frac{9}{32}$		
		$13\frac{1}{2}\%$
		1.27%
		$7\frac{1}{4}\%$
	0.005	
	1.2	
	3.075	
$\frac{23}{27}$		
$\frac{19}{4}$		
$2\frac{10}{11}$		
$\frac{17}{10000}$		