

Fractions, decimals and percentages are different ways of representing the same amount. There is often a need to convert one quantity to another.

**To convert Percentages to:**

- a) Decimals: remove the percent sign and divide by 100 (or move the decimal point two places to the left)
- b) Fractions: remove the percent sign and place over 100 and reduce to its lowest terms.

Eg. 60% as a

a) Decimal = 0.60      b) Fraction =  $\frac{60}{100} = \frac{3}{5}$

**To convert Fractions to:**

- a) Decimals: Divide numerator by denominator
- b) Percentages: remove the percent sign and place over 100 and multiply by 100.

**To convert Decimals to:**

- a) Fractions: Determine what the place value the non-zero digit is at the right and use that as the denominator.
- b) Percentages: multiply by 100 (or move the decimal point two places to the right and add a % sign).

1. Complete the table below:

	Fraction	Decimal	Percentage
a)	$\frac{36}{100}$		
b)		0.45	
c)			82%
d)	$\frac{3}{4}$		
e)		0.04	
f)			22%
g)			220%
h)	$\frac{1}{2}$		
i)			15%
j)		0.01	

2. Grade 12 was surveyed on their favorite fast food restaurant and the results are listed in the table:

	Fast Food	%
a)	Wendy's	24%
b)	Burger King	11%
c)	McDonalds	46%
d)	Others	

- a) Complete 'others' in the table
- b) Write 46% as a decimal \_\_\_\_\_
- c) Write 24% as a fraction in lowest terms \_\_\_\_\_
- d) If 200 students were surveyed, how many chose:
  - (i) McDonalds \_\_\_\_\_ Wendy's \_\_\_\_\_

3. Shavado filled his car's gas tank on Monday

and by Thursday the gas gauge read  $\frac{5}{8}$ .



- a) \_\_\_\_\_ What fraction of gas had been used?
- b) \_\_\_\_\_ Convert the fraction of gas used to a decimal.
- c) \_\_\_\_\_ Shavado spent \$44.62 to fill the tank which holds 11.5 gallons. What was the cost of fuel per gallon?
- d) \_\_\_\_\_ By Saturday the gas gauge read  $\frac{1}{16}$ . What percentage of the fuel had been used from Thursday?

4. Howard said that he was so hungry that he ate 5% of the pizza at a party at Dominoes last night.



- a) Write this amount as a:
  - (i) fraction in lowest terms \_\_\_\_\_
  - (ii) decimal \_\_\_\_\_
- b) \_\_\_\_\_ If 6 medium pizzas cut into 10 slices, and 5 large pizzas cut into 12 slices were bought, how many slices did Howard eat?
- c) \_\_\_\_\_ If each slice cost \$1.29, how much did Howard pay?
- d) Of the remaining pizza, one third was eaten by the children and the rest by the adults. How many slices were eaten by:
  - (i) adults \_\_\_\_\_
  - (ii) children \_\_\_\_\_

5. Joe and Jill recorded points obtained in four games where the maximum points were 160 in each .

	Game	Joe	% Joe	Jill	% Jill
a)	Tron	32		40	
b)	Pac	72		112	
c)	Gala	152		24	
d)	Qube	96		120	

- a) Complete the columns by finding the percentage of points earned.
- c) They played ZORK. Joe got 140 points and Jill got 45% more. How many points did Jill get? \_\_\_\_\_