Start

Solve the problem

yes

Draw and label the process flow chart

Problem is underspecified

ndf<0

yes

ndf=0

No

Obtain the data that we needed but missing in the problem statement

Not enough independent equations

yes

ndf>0

(Degree of freedom)

Determine the no. of unknown variables

ndf

Not soluble problem

Calculate the degree of freedom

Write independent material balance equations

Stoichiometry coefficient

Determine the no. of the independent equations

Obtain data that we needed but

not given

If a component is in multiple phases take it in single phase

No. of independent relations for a process

Important things to consider