Faraday's Law of Magnetic Induction:

$$emf = -N\frac{\Delta[AB(\cos\theta)]}{\Delta t}$$

Where:
N is the number of turns or loops of wire
A is the areas of each loop (assumes they are similar) in m^2.
B is the magnetic field strength in Teslas.
θ is the angle between the normal of the coil and the direction of B.
t is time in seconds.

But what about Δ? Notice Δ is on the outside of the parenthesis. This means that for an emf to occur there has to be a change of one of those quantities: A, B, or θ. There must be a change of area (the loops are contracted or expanded), a change of magnetic field strength, or a change of position.

Each of these changes actually changes the B going through the loops. B changing is obvious. If the area changes, then more or less B goes through A (more if A increases). If θ changes more or less B goes through the loops (more if A is perpendicular to B). If θ changes continually (which is the most common method, since it is easier to move A's position in a fixed magnetic field [permanent magnets] than to alter B or adjust A) then you will have to use ω (the angular frequency) which is Δθ/Δt.

Be sure to remember that Δ always means final – initial. Sometimes it will give a negative value to A or B.

Example: Find the emf of a 3 coil circuit that changes area from 1.2 m^2 to 0.8 m^2 in 0.12 seconds. The magnetic field strength is 4 Teslas and the angle between the direction of the magnetic field strength and the normal of the coils in 60^o.

Assign Variables:
N = 3
$\Delta A = A_{final} - A_{initial} = 0.8m^2 - 1.2\ m^2 = -0.4\ m^2$
B = 4 T
$\theta = 60^o$
Δt = 0.12 sec

$$emf = -N\frac{\Delta[AB(\cos\theta)]}{\Delta t}$$

$$emf = -3\frac{[-0.4(4)(\cos 60^o)]}{0.12\,\text{sec}}$$

$$emf = -3\frac{(-1.6)(0.5)}{0.12}$$

$$emf = -3\frac{(-0.8)}{0.12}$$

$$emf = 20\ \text{volts}$$