

## 2. Poisson Equation $\rightarrow$

The Poisson's differential equation is

$$\nabla^2 \phi = \rho$$

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where  $\rho$  is a function of position co-ordinates and is called the source density. The function  $\phi$  may represent the same physical quantities as for Laplace's equation. But in a region containing matter or electric charge or magnetic source or heat source or fluid source depending on physical situation.

## 3. Heat flow equation $\rightarrow$

The time dependent heat flow equation is

$$\nabla^2 \phi = \frac{1}{h^2} \frac{\partial \phi}{\partial t}$$

where  $h^2$  is a constant and is called the diffusivity whereas  $\phi$  may be the non-steady state temperature with no heat source or it may be the concentration of a diffusing material.

2010					MAY					2010					JUNE								
Mon	31	3	10	17	24	Mon	7	14	21	28	Mon	7	14	21	28	Mon	7	14	21	28			
Tue		4	11	18	25	Tue	1	8	15	22	29	Tue	1	8	15	22	29	Tue	1	8	15	22	29
Wed		5	12	19	26	Wed	2	9	16	23	30	Wed	2	9	16	23	30	Wed	2	9	16	23	30
Thu		6	13	20	27	Thu	3	10	17	24	Thu	3	10	17	24	Thu	3	10	17	24			
Fri		7	14	21	28	Fri	4	11	18	25	Fri	4	11	18	25	Fri	4	11	18	25			