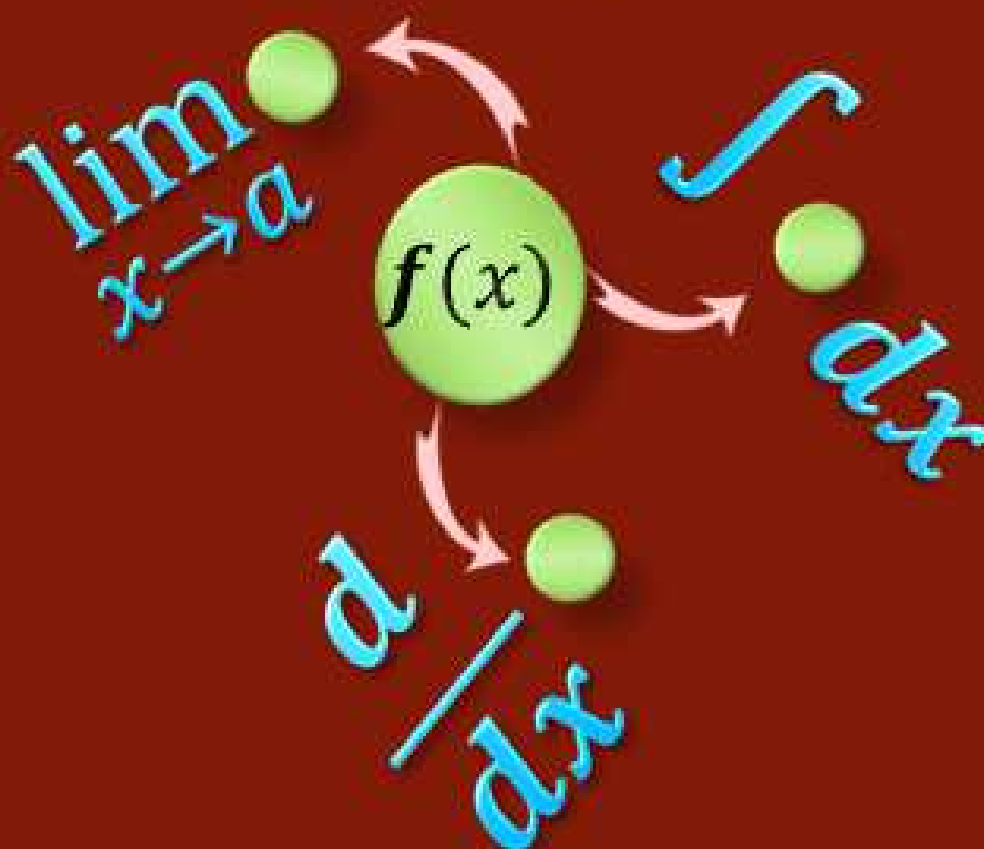


Book 2

# CALCULUS

WITH APPLICATIONS

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## Chapter 1

**CLICK CALCULUS**

Sand, wood, wire, nails, water, door, bricks, window, pipes etc. are placed on a plot to build a building.

SAND	WOOD	WIRE
NAILS	WATER	DOOR
BRICKS	WINDOW	PIPES

The skilled people required to build it are:

DRIVER	MASON	CARPENTER
GARDENER	ELECTICIAN	...

First of all, select mason to build the structure. The mason has the following tools:

HAMMER	TROLLEY	SPADE
LEVEL	TROWEL	...

To construct the wall with bricks, the mason needs the mixture of sand, cement and water. He takes the tools "spade and trolley" to prepare the mixture.

He takes 12 trolley of sand and 3 trolley of cement and mixes them with water. The mason prepares the mixture four times with different quantities of sand, cement and water. Nobody is interested to note the quantities of the things which are being used in the mixture, except a mathematician. The quantities of sand and cement which he notes are given below:

SANDN (TROLLEIES) $x$	12	24	20
CEMENT (TROLLEIES) $f(x)$	3	6	5

Using the above data, the mathematician forms the following function  $f$  of  $x$

$$f(x) = \frac{x}{4}$$

Great! The function has been formed.

NOW

“Click On Calculus”

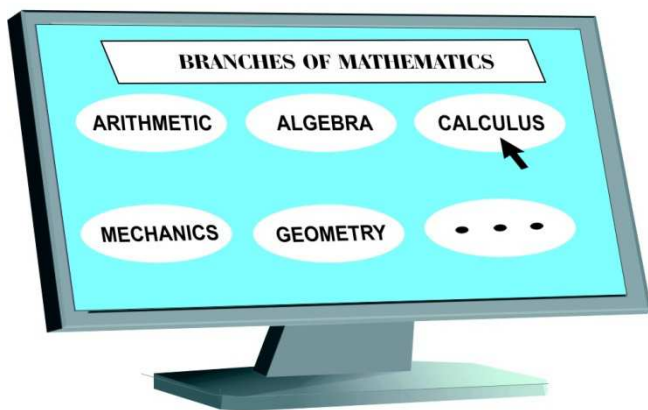


Figure 0.4

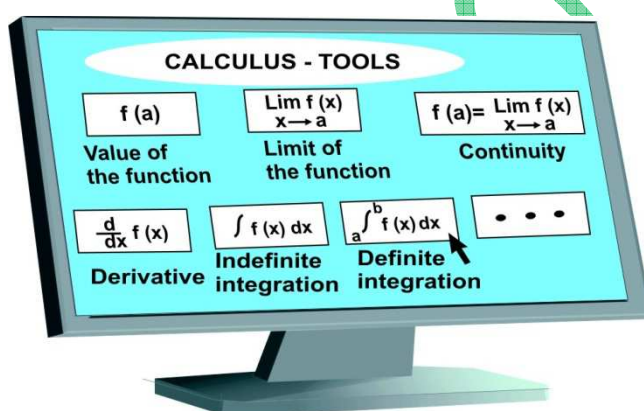


Figure 0.5