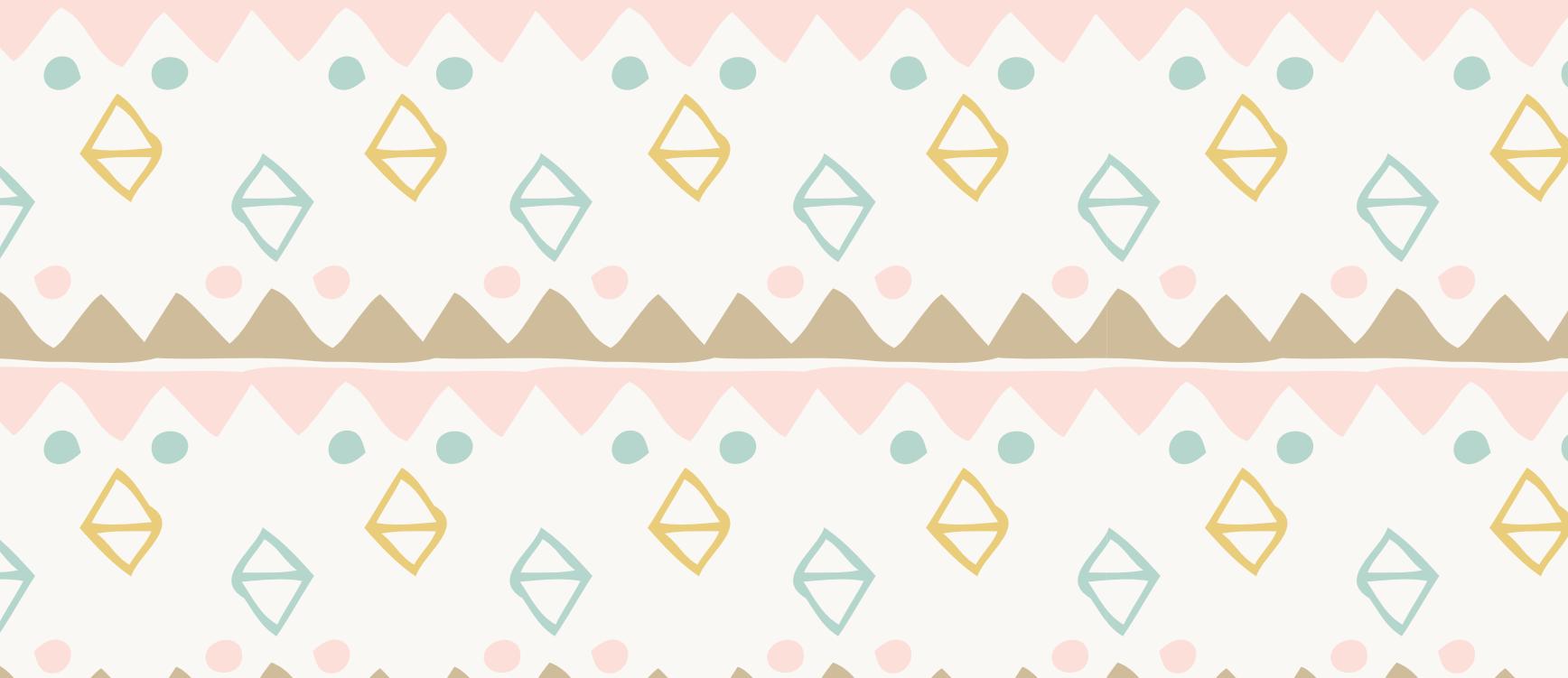


# Math 2200-01 (Calculus I) Spring 2020

Book 1



Calculus I : Single-variable calculus  $y = f(x)$  for example (one input variable  $x$ , one output variable). Derivatives (rates of change) : differential calculus.

Calculus II : also single-variable . Integral calculus.

Calculus III : multivariable i.e. several input variables and/or several output variables eg. position  $(x(t), y(t), z(t))$  of an object at time  $t$ : one input  $t$ , three output variables  $x(t), y(t), z(t)$ .

Eg. Temperature in this room as a function of position  $T(x,y,z)$   
(three inputs  $x,y,z$ ; one output  $T$ )

Eg. Wind velocity as a function of position : three inputs  $x,y,z$ ; three outputs are the components of wind velocity.