CALCULUS 12 LG 20

Course Final Exam



This is the LG 20 course final exam which will be on the material learned in the course. Graphing calculators are not permitted on the final but will not be necessary.

17 written questions (55 marks)

POSSIBLE TOPICS

- Limits as x approaches a number and as x approaches ±∞
- Continuity of a function (including from the left or right, removable and non-removable)
- Derivatives (product rule, quotient rule, chain rule, implicit, trig (no inverse trig), exponential and logarithmic)
- Find equation of a tangent line at a point.
- Local linear approximation
- Related rates
- Increasing/decreasing, concave up/down, inflection points.
- Relative maximum and minimum
- Absolute maximum and minimum
- Integration definite and indefinite (including by substitution)
- Reiman Sums (left, right, midpoint)
- Position, velocity and acceleration problems.
- Displacement and total distance travelled
- Area between curves
- Volumes by revolution and cross section.
- Solving differential equations with an initial value.