

A number of "overall communication marks" are awarded for proper use of mathematical form according to the following guidelines.

Calculations and algebraic steps:

- Writing one equal sign per line
- Proper use of brackets to show multiplication
- Writing answers in simplified form
- Showing your work (substituting values into a formula, setting $y = 0$, etc.)
- Showing your work (important conceptual steps or simplification in a solution)
- Showing "side calculations" separately and only placing "=" signs where expressions are equal
- Identifying and stating theorems used (ASTT, SAT, etc.)

Functions and equations:

- Including " $y =$ " or " $f(x) =$ " or " $f^{-1}(x)$ " when writing the equation for a function or its inverse
- Stating coordinate points (x, y) in the correct order and with brackets
- Including {brace brackets} around sets (particularly to show domain and range)
- Indicating the variable for which you are solving (ex. " $x =$ ") particularly with the quadratic formula

Graphs:

- Scales are clearly labeled
- Axes are labeled and have arrows on the end to show they are continuous
- The graph of a function curves in the correct direction
- The graph of a function includes a single smooth curve or a straight line
- The graph of a function clearly approaches but does not touch asymptotes
- Parabolas (and other polynomial functions) are curved not pointed at local max/min points
- Arrows are used to indicate that the graph of a function continues beyond the edge of a grid
- Graphs of sine and cosine functions are curved (waves) not zigzag (sawtooth)

Application problems:

- Include correct units in final answers
- Include appropriate let statements
- Include appropriate concluding statements
- Include appropriate diagrams to define variables

MATHEMATICAL PROCESS EXPECTATIONS

Communication: Throughout this course, students will communicate mathematical thinking orally, visually, and in writing, using precise mathematical vocabulary and a variety of appropriate representations, and observing mathematical conventions.