

Task Verbs Used in Free-Response Questions

The following task verbs are commonly used in the free-response questions:

- **Approximate:** Use rounded decimal values or other estimates in calculations, which require writing an expression to show work.
- **Calculate/Write an expression:** Write an appropriate expression or equation to answer a question. Unless otherwise directed, calculations also require evaluating an expression or solving an equation, but the expression or equation must also be presented to show work. “Calculate” tasks might also be formulated as “How many?” or “What is the value?”
- **Determine:** Apply an appropriate definition, theorem, or test to identify values, intervals, or solutions whose existence or uniqueness can be established. “Determine” tasks may also be phrased as “Find.”
- **Estimate:** Use models or representations to find approximate values for functions.
- **Evaluate:** Apply mathematical processes, including the use of appropriate rounding procedures, to find the value of an expression at a given point or over a given interval.
- **Explain:** Use appropriate definitions or theorems to provide reasons or rationales for solutions and conclusions. “Explain” tasks may also be phrased as “Give a reason for...”
- **Identify/Indicate:** Indicate or provide information about a specified topic, without elaboration or explanation.
- **Interpret:** Describe the connection between a mathematical expression or solution and its meaning within the realistic context of a problem, often including consideration of units.
- **Interpret (when given a representation):** Identify mathematical information represented graphically, numerically, analytically, and/or verbally, with and without technology.
- **Justify:** Identify a logical sequence of mathematical definitions, theorems, or tests to support an argument or conclusion, explain why these apply, and then apply them.
- **Represent:** Use appropriate graphs, symbols, words, and/or tables of numerical values to describe mathematical concepts, characteristics, and/or relationships.
- **Verify:** Confirm that the conditions of a mathematical definition, theorem, or test are met in order to explain why it applies in a given situation. Alternately, confirm that solutions are accurate and appropriate.