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| **Attribute's name** | **Definition** | **Key actions** |
| A1. Recognize and identify | This process refers to the student’s ability to recognize symbols, numbers, geometric figures, patterns, or explicit data in a statement or visual representation. In this category, the student does not need to transform or interpret the information; they simply locate or select it. For example, identifying which is the largest number in a list or pointing out a fraction shown graphically. | (1) Points out or selects evident data in tables, graphs, or statements. (2) Identifies geometric figures, symbols, or familiar mathematical representations. (3) Locates numbers, quantities, or specific positions in a given set. (4) Distinguishes between units of measurement, types of angles, or common fractions. (5) Reproduces previously seen examples or models without transformation. |
| A2. Understand and interpret | This implies that the student can build meaning from a mathematical problem by interpreting relationships between quantities, ideas, or representations. This category includes translating a verbal situation into a mathematical expression, understanding instructions, or identifying the required operation. For example, interpreting that “Juan has twice as many apples as Ana” implies a multiplicative relationship. | (1) Relates parts of a verbal problem to mathematical expressions. (2) Interprets the meaning of a situation represented with numbers or graphics. (3) Translates information from one format to another (text to operation, graph to fraction, etc.). (4) Determines the mathematical operation required from the context. (5) Classifies or groups elements according to a given or identified rule. (6) Determines relationships between quantities (e.g., double, half, more than). |
| A3. Apply procedures | This consists of the ability to use algorithms, rules, or known mathematical formulas to solve exercises or problems. This process requires the student to correctly perform operations such as addition, subtraction, multiplication, division, measurement, unit conversion, or equation solving, without needing to justify the chosen procedure. For example, calculating the area of a rectangle using the corresponding formula. | (1) Correctly performs algorithms for addition, subtraction, multiplication, or division. (2) Uses known formulas (area, perimeter, unit conversion, etc.). (3) Calculates with fractions, decimals, percentages, or ratios. (4) Solves equations or equalities using known steps. (5) Makes operational estimations systematically. (6) Follows step-by-step instructions to solve an exercise. |
| A4. Reason and justify | This refers to the ability to formulate justifications, establish logical relationships, compare strategies, or generate non-obvious solutions. This category includes the capacity to formulate conjectures, generalize patterns, detect errors in procedures, and explain why a solution is valid. For example, justifying why two fractions represent the same amount or determining which of two procedures is more efficient. | (1) Justifies a response by explaining the followed procedure. (2) Compares different paths to solve the same problem. (3) Detects errors or contradictions in a given solution. (4) Generalizes numerical or geometric patterns. (5) Formulates inferences or conjectures from given data. (6) Develops explanations using appropriate mathematical language. |

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| Ítem | A1 | A2 | A3 | A4 | ITEM |
| 1 | 1 | 1 | 0 | 0 | A circle with a line and text  AI-generated content may be incorrect. |
| 2a-d | 0 | 0 | 1 | 0 | A close-up of a number  AI-generated content may be incorrect. |
| 3 | 0 | 1 | 1 | 0 |  |
| 4a | 0 | 1 | 0 | 0 | A close up of a text  AI-generated content may be incorrect. |
| 4b | 0 | 0 | 1 | 0 | A white background with black and white clouds  AI-generated content may be incorrect. |
| 4c | 0 | 1 | 1 | 0 | A black text on a white background  AI-generated content may be incorrect. |
| 5a-c | 0 | 0 | 1 | 0 | A rectangular object with numbers and symbols  AI-generated content may be incorrect. |
| 6 | 0 | 1 | 1 | 1\* | A close up of a sign  AI-generated content may be incorrect. |
| 7a | 1 | 1 | 1\* | 0 | A screenshot of a white background  AI-generated content may be incorrect. |
| 7b | 1 | 1 | 1 | 1\* | A screenshot of a math test  AI-generated content may be incorrect. |
| 8 | 0 | 1 | 1 | 1\* | A graph of a line with a line drawn on it  AI-generated content may be incorrect. |
| 9 | 1 | 1 | 1 | 1 | A screenshot of a chat  AI-generated content may be incorrect. |
| 10a | 1 | 1 | 0 | 0 | A screenshot of a white background  AI-generated content may be incorrect. |
| 10b | 1 | 1 | 1 | 1 | A diagram of a circle with lines and circles  AI-generated content may be incorrect. |
| 10c | 1 | 0 | 0 | 0 |  |

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| Ítem | A1 | A2 | A3 | A4 | ITEM |
| 1a-c | 0 | 0 | 1 | 0 |  |
|  | 0 | 1 | 1 | 0 |  |
| 2 | 0 | 0 | 1 | 0 |  |
| 3 | 0 | 1 | 1 | 1\* |  |
| 4 | 1 | 1 | 0 | 0 |  |
| 5a-b | 0 | 0 | 1 | 0 |  |
| 6a | 0 | 0 | 1 | 0 |  |
| 6b | 0 | 1 | 1 | 0 |  |
| 7 | 0 | 1 | 1 | 1 |  |
| 8 | 1 | 1 | 0 | 0 |  |
| 9a | 1 | 1 | 1\* | 0 |  |
| 9b | 1 | 1 | 0 | 1 |  |
| 10 | 0 | 1 | 1 | 1 |  |
| 11 | 0 | 1 | 1 | 1 |  |
| 12 | 1 | 1 | 0 | 1\* |  |
| 13 | 1 | 1 | 0 | 1\* |  |
| 14a | 1 | 1 | 0 | 1\* |  |
| 14b | 1 | 1 | 0 | 1\* |  |
| 14c | 1 | 1 | 1 | 1 |  |
| 15a | 0 | 1 | 0 | 1 |  |
| 15b | 0 | 1 | 1 | 0 |  |
| 16a | 0 | 1 | 0 | 0 |  |
| 16b | 0 | 1 | 1 | 0 |  |