|  |
| --- |
| **Evaluating Algebraic Expressions** |
| Recognizes expressions with variables in formulas, including understanding a variable as a changing quantity“The expression *l* × *w* is the formula for the area of a rectangle, where *l* is the length of the rectangle and *w* is the width.” | Evaluates expressions with variables in formulasHow can you find the area of a rectangle with length 15 cm and width 8 cm?“I used the formula *A* = *l* × *w*. I substituted 15 cm for *l* and 8 cm for *w*. *A* = *l* × *w*  = 15 cm × 8 cm  = 120 cm2The area is 120 cm2. | Evaluates algebraic expressions without relating to a visual model or real-world situationHow can you determine the value of the expression 3*x* + *y* when *x* = 2.5 and *y* = 3.5?“I substituted the values for the variables and then did the calculations. 3*x* + *y* = 3(2.5) + (3.5) = 7.5 + 3.5 = 11” | Solves problems that involve writing and evaluating algebraic expressionsI want to fence a rectangular area that is 5 m long and 3 m wide for a pet dog. How can I determine the perimeter of this rectangle?“I know the formula for the perimeter of a rectangle is *P* = 2*l* + 2*w*. I substituted 5 m for *l* and 3 m for *w*, then did the calculations.*P* = 2*l* + 2*w*  = 2(5 m) + 2(3 m) = 10 m + 6 m = 16 mThe dog’s area has a perimeter of 16 m.” |
| **Observations/Documentation** |
|  |  |  |  |