

PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** September 4 to September 7**DAY:** Tuesday

RISD Objective: Provided an algebraic expression with multiple operations (including absolute value operations), students will be able to evaluate that expression when given numerical values for the variables.

PROBLEM #11

Joe and Becky are buying fish for their new aquarium. The expression $3g + 4a$ represents the cost in dollars of buying fish where 'g' is the number of guppies purchased and 'a' is the number of angel fish purchased. Find the cost of fish if they buy 12 guppies and 4 angel fish. Explain your work.

MODEL SOLUTION #11

Since they are buying twelve guppies, then $g = 12$. Since they are buying four angel fish, then $a = 4$. Therefore, I substitute these values in for the variables in the expression and follow the order of operations to simplify it:

$$3g + 4a$$

$$3(12) + 4(4)$$

$$36 + 16$$

$$52$$

Therefore, the cost of the fish is \$52