

Modified Stasny Problem-Solving Method

ADDITION & SUBTRACTION

Sample

A fish tank **has** 27 **small fish** and 16 **large fish**. How many **fish** are in the tank?

- Record values and units and the verbs associated with each unit.

Units	Verbs
27 small fish	has
16 large fish	has

Units	Verbs
27 small fish	has
16 large fish	has
? fish	+ -

Include the unit of the solution as well.

- Determine if the units are the same or different. (*Be aware of questions regarding categories, such as boys, girls, children.*)
 - If all units are the **All the Same**, consider **Addition** or **Subtraction**.
 - If any of the units have a **Major Difference**, consider **Multiplication** or **Division**.
 - Examine the verbs for additional support in selecting an operation.
- Consider the presence or absence of other features of the problem. Answer the following questions:
 - Do the verbs suggest combining, separating or comparing quantities?
 - Has a total been provided?
 - ✓ If a total is provided, subtraction is more likely required.
 - ✓ If a total is not provided, addition is more likely required.

MULTIPLICATION & DIVISION

Sample

Transportation for a field trip **costs** \$450. Ninety **students** will equally **contribute** money to pay the fee. How much **money** will each student need to bring to cover the cost of the transportation?

- Record values and units and the verbs associated with each unit.

Units	Verbs
\$450	costs
90 students	contribute

Units	Verbs
\$450	costs
90 students	contribute
\$?	x ÷

Include the unit of the solution as well.

- Determine if the units are the same or different. (*Be aware of questions regarding categories, such as boys, girls, children.*)
 - If all units are the **All the Same**, consider **Addition** or **Subtraction**.
 - If any of the units have a **Major Difference**, consider **Multiplication** or **Division**.
 - Examine the verbs for additional support in selecting an operation.
- Consider the presence or absence of other features of the problem. Answer the following questions:
 - Do the verbs suggest counting groups or creating groups?
 - Has a total been provided?
 - ✓ If a total is provided, division is more likely required.
 - ✓ If a total is not provided, multiplication is more likely required.