

The teacher will need to see all of your work. Mark (x) off each one as you use it. Be sure to include the following:

- Pictures, charts, graphs, or t-tables that support your explanation
- A written explanation with detailed sentences
- The equation or number sentence
- The answer (Ask yourself: Is my answer reasonable? Why or why not?)
- The solution in more than one way or related to other situations

**Teacher Use Only**

**Analytical Score:**

**Understanding**                    **N A P E**

**Strategy/Reasoning**           **N A P E**

**Communication**                 **N A P E**

**Holistic Score**                   **N A P E**

Name: \_\_\_\_\_ Grade: \_\_\_\_\_ Date: \_\_\_\_\_

Teacher: \_\_\_\_\_ School: \_\_\_\_\_

# Sink or Swim?

In New Zealand there is a river known as the Kaituna. On it, there exists a 23-foot waterfall; some people like to go over the waterfall on a raft. A group of 6 people decide to give it a try; they consist of four adults and two teenagers.

The raft **MUST** be traveling at least 30 miles per hour in order to successfully go over the falls; otherwise it will tip over. The river flows at one-sixth of the needed speed. An adult can paddle the raft at a speed of 5 miles per hour. Three teenagers can paddle the same speed as two adults.

How fast is the raft traveling?

Will the group be able to make it over the falls without tipping over?

