CREATE THE PROBLEM: NEWTON’S SECOND LAW

# Instructions

You will design a real-world problem that can be solved using the equation F = ma. Then, solve it and justify why it demonstrates Newton’s Second Law. After completing your work, you will trade problems with a partner and solve each other’s scenario. Finally, turn in your completed handout for review.

# Step 1: Given Solution

The solution you will use is:  
**F = \_\_\_\_\_\_ N**

# Step 2: My Problem

Write a real-world scenario that would require F = ma to solve and result in the given solution. Include:

* Object’s mass
* Acceleration (or force)
* Context (cart, bike, ball, etc.)

**My Problem:**

# Step 3: My Solution

Solve your problem to confirm it matches the given solution. Show your calculations.

**Work:**

**Answer:**

# Step 4: Justification

Explain why your problem demonstrates Newton’s Second Law. Connect force, mass, and acceleration.

**Justification:**

# Step 5: Partner Problem

Trade problems with a partner and solve theirs below.

**Partner’s Problem:**

**Work:**

**Answer:**