# "Do a Load of Laundry"

### 1. Identify the problem:

- I'm running out of clean clothes for the week, and the laundry is piling up. I need to figure out how to efficiently wash and dry everything before the weekend.

#### 2. What do I need to know to answer the question?

- What: How many clothes need to be washed? How do I separate them (darks, lights, delicates)?
- Where: Will I be doing this at home or in a laundromat? If at a laundromat, how much will it cost?
- When: What's my schedule like? When can I do the laundry? How long will it take to finish both washing and drying?
- Cost: How much will the washing and drying cost in total? Can I do it all in one load or will I need multiple loads?

#### 3. Identify all the data I need to collect:

- Clothing:
- 4 t-shirts
- 2 pairs of jeans
- 3 pairs of socks
- 1 hoodie
- 1 towel
- 1 bedsheet
- Costs:
  - Washer cost: \$3 for a 45-minute cycle (large load)
- Dryer cost: \$1.75 for 30 minutes

- Time:
  - 45 minutes for washing, 30 minutes for drying.

#### 4. Organize the data:

- Clothes count:
- Total: 4 t-shirts, 2 pairs of jeans, 3 socks, 1 hoodie, 1 towel, 1 bedsheet
- Colors: 3 dark items (jeans, hoodie), 4 light items (t-shirts, socks, bedsheet, towel)
- Washer size: I will use a large washer to fit everything into one load.
- Cost breakdown:
  - Washing: \$3 for a large load (45 minutes).
  - Drying: \$1.75 for 30 minutes (may need an additional 10 minutes for the towel and hoodie).
- -Total time: 45 minutes for washing + 30 minutes for drying = 1 hour and 15 minutes.

### 5. Find and identify the relationship:

- Color separation: I don't need to separate the clothes into multiple loads since I have mostly light items, but I should be cautious of the hoodie and jeans bleeding onto the lighter clothes.
- Drying: Heavier items (hoodie, towel, jeans) may take longer to dry compared to the lighter ones (t-shirts, socks).

#### 6. To find a solution:

- Plan:
- Use a large washer for all the clothes (3 dark, 4 light) to save time and money.
- Wash everything together for 45 minutes (\$3).
- For drying, start with the entire load in one dryer, and after 30 minutes, remove the t-shirts and socks. Dry the heavier items (hoodie, jeans, towel) for an additional 10 minutes.
  - Total cost: \$3 for washing + \$1.75 for drying = \$4.75.
  - Total time: 45 minutes washing + 40 minutes drying = 1 hour and 25 minutes.

## 7. Presentation (tell a story):

- I've collected the data and realized I can do all the laundry in one load, which saves time and money. The washer will take 45 minutes, costing \$3, and the dryer will take 40 minutes total (30 minutes initially, plus 10 more for heavier clothes), costing \$1.75.
- The total cost will be \$4.75, and the entire process will take around 1 hour and 25 minutes. I plan to do this on **Friday evening** since I'll be done with work by 6pm, giving me enough time to fold everything afterward and have my clothes ready before the weekend.
- -Moving forward, I'll aim to do my laundry **every Friday evening** to avoid letting it pile up. By sticking to this schedule, I can prevent last-minute stress, save money, and ensure everything gets properly cleaned and dried.