Chapter 2: Data-Driven Decision-Making

# Examples of Algorithms

## Corresponding reading: Chapter 2, Page 3

### Purpose: Understanding the meaning of an algorithm used to solve a mathematical model.

1. Search for “algorithm” in the internet. Describe in your words what an algorithm is.
2. Watch the following video for simple examples of algorithm represented by flowcharts.

<https://www.youtube.com/watch?v=6qp8AiEPMYk&ab_channel=EngineersTutor>

1. Following the examples in the video, **draw a flowchart** and **write the corresponding algorithm** for **each** of the following cases:
   * Calculating the volume of a sphere
   * Figuring out if a number is prime
   * Reversing a word (e.g., “water” 🡪 “retaw”)

***Note:*** *Understanding the case and what you need to do is PART OF THE CASE. If you do not understand a specific part, or are not sure what you should do, you need to review the corresponding reading section in the text before asking for help. You might also need to do some search on the internet. That is all part of the case and your learning process.*