

## Instructions for all assignments:

- Submit assignments in Canvas.
- Show work. Providing final answers is NOT enough.
- For challenging problems, get help (e.g., visit my office hours) if needed.

## MATH 3305 (FALL 25) HOMEWORK #1

**INSTRUCTOR: ZHAO**  
**DUE: Sat. 8/30** (Assigned 8/26)

1. The GPAs of a sample of 5 students enrolled in Math 3305 are obtained:

$$\{3.2, 2.3, 3.4, 4.0, 3.0\}.$$

Find the values of the following statistics. Use the correct symbol for each.

- (a) Sample mean.
  - (b) Sample median.
  - (c) Sample standard deviation.
2. Page 6, Exercise 1.1.4 (page 46 of library e-book).  
*In the diagram below, . . . . .*
  3. Page 7, Exercise 1.1.10 (page 47 of library e-book).  
*An assembly line is observed until . . . . .*
  4. A candy bar with a 25-gram label weight is selected at random from a production line and weighted. Assuming that a candy bar cannot exceed 25 grams in weight, specify the sample space.
  5. Determine whether each sample space in Problems 2-4 above is a countable sample space.