Introduction to Statistics – Midterm Exam 14th October 2026	Prof.	Student's signature
Last Name:	First Name:	Student's ID:

INSTRUCTIONS

- Answer every question on this paper; no separate answer sheet.
- Calculators are not permitted.
- Show your working for full credit on Part Two.

Part One — Multiple Choice

1. *(4 points)* A fair six-sided die is rolled once. What is the probability of rolling a number greater than 4?

(a) 2/3

(b) 1/2

(c) 1/3

(d) 1/6

8 points

2. *(4 points)* Which measure of central tendency is most resistant to outliers?

(a) the median

(b) the range

(c) the mode

(d) the mean

Part Two — Worked Problems

Write your final answer in the box provided.

Exercise 1. A population has mean $\mu = 13$ and a sample adds $b = 2$ new observations each with value 1 above the mean. Compute the new sum $13 \cdot 10 + 2 \cdot 1 =$ \boxed{} .

6 points

Exercise 2. A biased coin lands heads with probability $p = 0.7$. If it is flipped twice and the flips are independent, the probability of two heads in a row is \boxed{} .

6 points