

Name: \_\_\_\_\_

Course & Section: \_\_\_\_\_

*Electronic copies of this homework are located in D2L.*

## Hypothesis Testing

### Part 1

Watch the Video: [Hypothesis Testing MTStatPAL Part 1](https://www.youtube.com/watch?v=weY20-PEmIQ) (https://www.youtube.com/watch?v=weY20-PEmIQ)

1. What symbol do we use to represent the null hypothesis?
  - a.  $H_1$
  - b.  $H_0$
  - c.  $H_a$

### Part 2

Watch the Video: [Hypothesis Testing MTStatPAL Part 2](https://www.youtube.com/watch?v=2i_tS7Ztqk) (https://www.youtube.com/watch?v=2i\_tS7Ztqk)

1. Which of the following is the appropriate structure for the hypothesis test matching the World Cup scenario using symbols?
  - a.  $H_0: p = .50$   $H_a: p < .50$
  - b.  $H_0: \mu = 69.3$   $H_a: \mu \neq 69.3$
  - c.  $H_0: p = .50$   $H_a: p > .50$
  - d.  $H_0: \mu = .50$   $H_a: \mu > .50$

### Part 3

Watch the Video: [Hypothesis Testing MTStatPAL Part 3](https://www.youtube.com/watch?v=JG2RbOEHX_Q) (https://www.youtube.com/watch?v=JG2RbOEHX\_Q)

1. Do you have enough evidence to say that more than 50% of soccer players are taller than average? **Note: Since you are only making your best guess about answering this question, this is not a wrong answer**
  - a. Yes
  - b. No

### Part 4

Watch the Video: [Hypothesis Testing MTStatPAL Part 4](https://www.youtube.com/watch?v=D6n0lgotBOM) (https://www.youtube.com/watch?v=D6n0lgotBOM)