

# Congratulations! You passed!

Grade received 100%

To pass 80% or higher

**Go to next  
item**

1. For optimal matching, what is optimized?

1 / 1 point

- ☐ distance is minimized one matched pair at a time
- ☐ total distance is maximized
- ☒ total distance is minimized

✓ **Correct**

2. After matching, balance can be assessed by:

1 / 1 point

- ☐ whether the causal effect estimate is significant
- ☒ standardized differences

✓ **Correct**

3. A large standardized difference for a covariate suggests:

1 / 1 point

- ☐ nothing, as standardized differences should not be used
- ☒ there is imbalance on this covariate
- ☐ there is balance on this covariate

✓ **Correct**

4. If there is a large treatment effect, then we expect the observed difference in mean of the outcome between matched pairs to be:

**1 / 1 point**

- ☒ very different from the difference in means if we randomly permute the treatment labels
- ☐ similar to the difference in means if we randomly permute the treatment labels

✓ **Correct**

Yes. There is a treatment effect, so the labels are meaningful. If there was no treatment effect, randomly switching the labels shouldn't matter.