

1. Lists and their contents are immutable, so their elements cannot be modified, added, or removed.

1 / 1 point

- ☐ True
☒ False

✓ Correct
Lists and their contents are mutable, so their elements can be modified, added, or removed. A list is a data structure that helps store and manipulate an ordered collection of items.

2. What Python method adds an element to the end of a list?

1 / 1 point

- ☐ `type()`
☐ `remove()`
☐ `pop()`
☒ `append()`

✓ Correct
Python's `append()` method adds an element to the end of a list.

3. A data professional wants to instantiate a tuple. What Python elements can they use to do so? Select all that apply.

1 / 1 point

- ☐ The `insert()` function
☒ Parentheses

✓ Correct
A data professional can use parentheses or the `tuple()` function to instantiate a tuple. A tuple is an immutable sequence that can contain elements of any data type.

- ☐ Square brackets
☒ The `tuple()` function

✓ Correct
A data professional can use parentheses or the `tuple()` function to instantiate a tuple. A tuple is an immutable sequence that can contain elements of any data type.

4. What Python technique formulaically creates a new list based on the values in an existing list?

0 / 1 point

- ☒ List conversion
- ☐ List comprehension
- ☐ List sequencing
- ☐ List nesting

☒ Incorrect
A list comprehension formulaically creates a new list based on the values in an existing list. A list comprehension functions like a for loop, but is a more efficient and elegant way to create a new list from an existing list.