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

◉ `append()`

○ `pop()`

○ `type()`

○ `remove()`

✓

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.

☑ 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.

☐

Square brackets

4.

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

1 / 1 point

○

List conversion

○

List nesting

◉

List comprehension

○

List sequencing

✓

Correct

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.