

CS150 L09: Lists - solution

1. What is the value of a after this code runs?

```
a = [2, 4, 6, 8]
a.remove(4)
a.pop(2)
```

- (A) [2, 4]
- (B) [6, 8]
- (C) [2, 6]
- (D) [2, 8]
- (E) The code produces an error

Answer: C

a.remove(4) removes the value 4, so a becomes [2, 6, 8].
a.pop(2) removes the element in position 2, which is 8.
So after this code runs a is [2, 6].

2. What is the value of a after this code runs? a = [2, 4, 6, 8] a.pop(2) a.remove(4)

- (A) [2, 4]
- (B) [6, 8]
- (C) [2, 6]
- (D) [2, 8]
- (E) The code produces an error

Answer: D

a.pop(2) removes the element in position 2, which is 6.
a.remove(4) removes the value 4, so a becomes [2, 8].
So after this code runs a is [2, 8].

3. What is the list produced by this code?

```
list(range(2, 7))
```

- (A) [0, 1, 2, 3, 4, 5, 6]
- (B) [0, 1, 2, 3, 4, 5, 6, 7]
- (C) [2, 3, 4, 5, 6]
- (D) [2, 3, 4, 5, 6, 7]
- (E) This code produces an error

Answer: C

range(2, 7) generates an iterable with the sequence 2,3,4,5,6. When used as the argument for the list constructor, the result is the list [2, 3, 4, 5, 6].