1. C. There is no default constructor defined

**Explanation:** when you define any constructor, the compiler does not automatically generate a default constructor**.**

1. A. Vehicle starting

**Explanation:** Even though Car has its own start method, it didn’t replace the original one. So when you call car.start(), it just uses the one from Vehicle and prints “Vehicle starting.”

1. B. 20 — obj2 and obj1 refer to the same object

**Explanation:** Both obj1 and obj2 point to the same object in memory, like two names for one person. So changing num through obj2 also changes it for obj1, and it prints 20.

1. C. NullPointerException

**Explanation:** Here s is equals to null, which means it's pointing to nothing now. Trying to call length() on nothing makes Java throw a NullPointerException.

1. null