

CMP 326 - Fall 2014 - Practice Quiz 5 Name: _____

- 1) Suppose you had a Java class `SpaceShip` that represents a space ship. Should the following variables and methods be static or non-static:

a variable representing the number of instances of class `SpaceShip` _____

a variable representing the year a space ship was built _____

a variable that represents the speed of light _____

a method that returns the number of instances of class `SpaceShip` _____

a method that refuels a `SpaceShip` object _____

an `equals` method that compares two `SpaceShip` instances _____

- 2) In Problem Set 5b, you wrote the class `Characteristic`, which represents a characteristic on an online dating profile. Part of this class is below:

```
public class Characteristic {
    private String description;
    private int rating;

    public Characteristic(String d) {
        description = d;
        rating = 0;
    }

    ...
}
```

Consider the class `DatingProfile`, which represent a profile on an online dating website. This class has two instance variables:

- `username`, which is a `String` representing the username of that profile
- `firstChar`, which is an instance of `Characteristic` representing the first characteristic that shows up on the dating profile.

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