

1. A class "Student" has fields for name, grade_level, and gpa. Mr. Hays writes code to create a Student object bobby_hays. Which of these statements is true (there may be one or more correct answers)?

Student class is an instance of bobby_hays

bobby_hays is an instance of Student class

an attribute of the bobby_hays object is gpa

an attribute of the Student instance is grade_level

2. Mr. Hays writes code to create a student object emma. Which of these statements is true?

gpa is an instance of emma

emma is an instance of three attributes

grade_level is an attribute of the emma object

Student class has three attributes

emma is an instance of Student class

Student is an instance of the emma object

3. Given the following Book class, which of the following lines of code would compile in another class?

```
public class Book
{
    private String title;
    private String author;
    private int year;

    public Book()
    {
        title = "Unknown";
        author = "Unknown";
        year = 0;
    }

    public Book(String t)
    {
        title = t;
        author = "Unknown";
        year = 0;
    }

    public Book(String t, String a, int y)
    {
        title = t;
        author = a;
        year = y;
    }
}
```

Book a;

Book b = new Book();

Book c = new Book(2019);

Book d = new Book("Hammer Time");

Book e = new Book(1999, "A Deepness in the Sky", "Vinge");

Book f = new Book("My Years At Analy", "Hays", 2025);

Book g = new Book("", "Hays", 2020);

4. Which of the following would NOT be a possible new constructor that we might add to the Book class?

public Book(int Year, boolean best_seller, String Title, String Author)

public Book(String Author)

public Book(String Author, String Title, int Year)

5. What is constructor overloading in one or more complete sentences?

const. overloading is when you have more than one class constructor, each with a different signature.

6. What do all constructors share with the class that they reside in?

The same name

7. What do we call the order and type of variables listed in a constructor header?

the signature

8. Circle the legal variable names shown in the following list:

2data data2 data_2 data-2
my f int my% myDog

Finally:

In the Day8.java class, after your books, write code to do the following:

Ask the user for an int value between from 1 to 99 (representing 1 to 99 cents) which represents the change you are due after a purchase. Print the cents, then the breakdown in quarters, dimes, nickels and pennies.

Sample output is below:

Please enter an integer value from 1 to 99:

```
▶▶ 66
   You entered 66 cents
   Quarters: 2
   Dimes: 1
   Nickels: 1
   Pennies: 1
```