

Unit 5 AP Computer Science A Practice Exam

Writing Classes

Section I – Free Response Section

Optional Time – 20 minutes

1 Question

- 1) This question involves the implementation of a `Train` class. A `Train` object is created with two parameters that specify the name of the train, and if the train is diesel or not.

The `Train` class has the following fields:

- `name`, which stores the name of the train.
- `isDiesel`, which stores whether or not the train has a diesel engine.
- `numPassengers`, which stores the number of passengers on the train. This field is initially set to 0.

The `Train` class has a constructor, demonstrated below:

```
Train thomas = new Train("Thomas", false);
```

This constructor initializes a `Train` object with the name of “Thomas” and it not being having a diesel engine, as well as the number of passengers to 0.

The `Train` class has the following methods:

- `addPassengers(numPassengersToAdd)`, which adds `numPassengersToAdd` to the `numPassengers` field.
- `unloadPassengers()`, which sets the `numPassengers` field to 0.

This practice test was created by Ajay Gandecha.

This test and I are not affiliated with, or endorsed by, the College Board.
No questions are copied from the College Board and were made on my own for you to prepare.
Good luck!

Write the complete `Train` class, including the constructor and any required instance variables and methods. Your implementation must meet all specifications and conform to the example.

END OF SECTION I

This practice test was created by Ajay Gandecha.

This test and I are not affiliated with, or endorsed by, the College Board.
No questions are copied from the College Board and were made on my own for you to prepare.
Good luck!