

Name _____

AP CS A – Midterm Exam

Multiple Choice

1. Consider a `PocketMonster` class which has three integer fields: `health`, `power`, and `accuracy`. The `PocketMonster` class has two methods, `bite` and `heal`. The constructor works as follows:

Create pika with health 100, power 80 and 30 accuracy

```
PocketMonster pika = new PocketMonster(100, 80, 30);
```

The `bite` method returns an integer representing damage done. The `accuracy` field represents a percentage from 1 to 100. The method returns the full value of `power` only `accuracy%` of the time; otherwise the method returns 0.

The `heal` method will increase the `health` field by one third of the current value of the `power` field (rounded down).

Using the example constructed above:

```
pika.bite()    //returns 80
pika.bite()    //returns 0
pika.bite()    //returns 0
pika.heal()    //increase the health from 100 to 126
```

Write the `PocketMonster` class beginning on the next page.

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Write the `PocketMonster` class on the space below.