

1.8 Documentation with Comments

Name: _____ Class: _____ Date: _____

Total: 9 marks

Objective

Build the skills to answer exam questions on **documentation with comments**.

You must be able to:

- write single-line **comments** 注释 (`//`) and block comments (`/* */`)
- understand that comments are ignored by the compiler
- state a **precondition** 前置条件 and a **postcondition** 后置条件
- use comments to explain intent

1 Worked examples

Study these first. Each one shows the method for a question type used later.

■ Comments

```
// this is a single-line comment    and    /* this is a block comment */.
```

Comments are **ignored by the compiler** but help humans read the code.

■ Pre- and postconditions

- **Precondition** —what must be true **before** the code runs.
- **Postcondition** —what will be true **after** it runs.

Good comments explain **intent**, not obvious code.

2 Practice

2.1 State the two ways to write comments in Java.

[2]

2.2 State whether comments affect how the program runs.

[1]

2.3 Define a precondition. [1]

3 Exam-style questions

3.1 A single-line comment in Java starts with [1]

- A /*
 - B //
 - C #
 - D <!--
-

3.2 Comments are [1]

- A run by the compiler
 - B ignored by the compiler
 - C errors
 - D program output
-

3.3 A method assumes its input number is positive.

(a) Name this kind of assumption. [1]

(b) Name what is stated to be true after the method finishes. [1]

(c) State one good purpose of a comment. [1]

4 Go further

- work through the **1.8 Documentation with Comments** lesson on the **Learn** page;
- read the **Using Objects** section of the AP Computer Science A handout on the **Know** page.

Solutions

2.1 // for a single line and /* */ for a block.

2.2 no —they are ignored by the compiler.

2.3 something that must be true before the code runs.

3.1 B.

3.2 B.

3.3 (a) a precondition. (b) a postcondition. (c) to explain the intent / aid readability.