1. Using Objects and Methods

Starter Quiz ·

AP Computer Science A Name: _____ Score: _____

1. An algorithm is best described as...
   - ☐ a type of computer
   - ☐ a run-time error
   - ☐ a single Java command
   - ☐ a finite, ordered set of steps that solves a problem
2. Which type stores whole numbers like 42?
   - ☐ String
   - ☐ int
   - ☐ double
   - ☐ boolean
3. In Java, the single = sign means...
   - ☐ test for equality
   - ☐ store the right side into the left variable
   - ☐ declare a type
   - ☐ print a value
4. What is the value of (int) 3.9 in Java?

   _____
5. An API documents a class's methods by telling you their...
   - ☐ file sizes
   - ☐ names, parameters, and return values
   - ☐ internal machine code
   - ☐ memory addresses
6. When a Java program runs, comments are...
   - ☐ printed to the screen
   - ☐ turned into errors
   - ☐ ignored by the compiler
   - ☐ run as code

7. What does Math.max(3, 8) return?

   _____

8. What does Math.pow(2, 3) equal (as a number)?

   _____

9. The special method called to build a new object is a _____ (one word).

   _____

10. s.toUpperCase(); on its own changes the String s in place.

    ☐ True ☐ False

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Answers ·

AP Computer Science A

1. **a finite, ordered set of steps that solves a problem**

   Finite, ordered steps that finish – that's an algorithm.

2. **int**

   int stores integers; double stores decimals.

3. **store the right side into the left variable**

   = is assignment; == tests equality.

4. **3**

   Casting to int truncates (drops decimals) → 3, not 4.

5. **names, parameters, and return values**

   You program to the documented name/params/return, not the inner code.

6. **ignored by the compiler**

   Comments are for humans – Java ignores them.

7. **8**

   max returns the larger of the two arguments.

8. **8**

   2 to the power 3 = 8 (returned as the double 8.0).

9. **constructor**

   The constructor sets up the new object.

10. **False**

    Strings are immutable – you must reassign s = s.toUpperCase();.