This writeup would probably get a grade of 1 or 2, and I would be tempted to give it a 0. There are no mathematical errors but the writing shows little to no effort in constructing a formal solution — it's just a blast of numbers and notation with little to no coherence or attention to the reader. AVOID THIS.

Ima Student
MTH 201-02
Solution for Section 1.1, Exercise 1

Note that nowhere in the writeup has the writer given a statement of the problem or its parts.

(a) **Solution**:

$$s(15) - s(0) = -94.7469$$

Correct answer, but there's no setup and no work shown. Also should use $\approx$ instead of $=$.

(b) **Solution**: For each interval $[a, b]$, we calculate the change in distance $s(b) - s(a)$ divided by the change in time $b - a = \frac{-94.7469}{15-0} = -6.58313$.

Don't use = after $b - a$ because the fraction to the right of the equals sign is not equal to $b - a$. Also show more work in setting up the calculation, and use $\approx$ rather than $=$ for the final equality.

-47.6929, -13.2509, -7.3472

These numbers do correspond to correct average velocities over the given intervals, but there's no setup or explanation given, and also no units. The reader has no chance of decoding what these numbers mean.

(c) **Solution**: By looking at the graph, that interval would be $[0, 4]$.

Lacks detail in the explanation. What is one supposed to see when we "look at the graph"? Needs to communicate the thought process to the reader.

(d) **Solution**: We can get the instantaneous velocities by plugging in values near 5 to the equation $\frac{s(a+h)-s(a)}{h}$

"Plug in" is slang; use "evaluate" instead

The fraction here is not an equation; use "expression" instead. Also there is no punctuation ending the sentence and the fraction should be multi-level

Value of h	Average velocity from $t = 5$ to $t = 5 + h$
0.1	22.2523 feet per second
0.01	21.8543 feet per second

The I.V. is 21.8543.

There's really not enough data in this table to draw a reasonable conclusion about the instantaneous velocity yet; add 2–3 more rows. Also, spell out "instantaneous velocity" rather than use an abbreviation.

(e) **Solution**: (b) was negative and (d) was positive. Downward motion.

Neither of these is a complete sentence. The first phrase doesn't start with a word. And there is no explanation for what "downward motion" means or why the writer thinks this is what negative velocity indicates. This answer alone would make the solution a borderline grade of 0.