Directions: Circle multiple choice answers. Write written responses on the provided lines. You do not need to answer in complete sentences. Annotate program in the margins.

1. Label each operator with a “N” for numeric, an “A” for augmented, or a “B” for boolean. (0.25 point each, 3 points total)

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| --- | --- | --- | --- |
| && | += | \*= | - |
| || | % | -= | /= |
| / | + | \* | ! |

1. Draw an arrow next to the statement(s) that are invalid. Correct the code by adding, removing, and changing components according to the context. (2 points)



1. Evaluate the following expression with Java rules. 6 \* (int) 4.5 % 2 == 16 - 2 \* 4 \* 2. (2 points)
2. True
3. False
4. 1.2
5. 0
6. Data types matching. Write the letter of the data type on the line. (0.25 points each, 2 points)

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| --- | --- | --- |
| 1. long | 1. boolean | 1. float |
| 1. double | 1. int | 1. byte |
| 1. short | 1. char |  |

1. ­\_\_\_\_\_\_\_\_ like an int but with a smaller capacity
2. \_\_\_\_\_\_\_\_ stores a Unicode character
3. \_\_\_\_\_\_\_\_ stores a floating-point number
4. \_\_\_\_\_\_\_\_ stores a whole number from -2.15 billion to 2.15 billion
5. \_\_\_\_\_\_\_\_ like an int but with a larger capacity
6. \_\_\_\_\_\_\_\_ stores double the capacity/precision of a float
7. \_\_\_\_\_\_\_\_ stores a whole number from -128 to 128
8. \_\_\_\_\_\_\_\_ stores true or false
9. Draw an arrow to the line(s) of code that contain ONLY a variable assignment. (2 points)



1. Why is it important to tell Java what data type a variable contains? (3 points)

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1. What operator is used to concatenate (combine) strings? Write its symbol on the line. (0.5 point)

\_\_\_\_\_\_\_\_\_\_\_\_

1. Which data type are you most likely to use for a number with a decimal? Write its name on the line. (1 point)

\_\_\_\_\_\_\_\_\_\_\_\_

1. Write an example of narrowing typecasting on the line below. (1 point)

\_\_\_\_\_\_\_\_\_\_\_\_

1. Which data type can hold the least amount of data? Write its name on the line. (1 point)

\_\_\_\_\_\_\_\_\_\_\_\_

1. Label each data type with a “DT”, each variable declaration with a “VD”, and each variable assignment with a “VA”, and each operator with an “O”. (3 points)



1. Take a guess: What do you think the following lines of code do? (0 points)



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Optional: How did the quiz go? Write your feedback below.

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