**Convert the following numbers from base 10 into base 2**

22 \_\_\_\_\_\_\_\_\_

143 \_\_\_\_\_\_\_\_\_

**Convert from base 2 to base 10**

0101 0001 \_\_\_\_\_\_\_\_\_

1110 1101 \_\_\_\_\_\_\_\_\_

**Convert from base 16 to base 10**

49 \_\_\_\_\_\_\_\_\_

BAD \_\_\_\_\_\_\_\_\_

**Use the ASCII table to fill in the following blanks:**

|  |  |  |
| --- | --- | --- |
| **Character** | **Decimal Number** | **Binary Number** |
| D |  |  |
|  |  | 1101111 |

**List the type of information that the following data types store as well as their size in bits**

|  |  |  |
| --- | --- | --- |
| **Data Type** | **What type of information stores:** | **Size (in bits)** |
| int |  |  |
| double |  |  |
| char |  |  |
| long |  |  |
| float |  |  |

\*Turn Me over there’s more on the back\*

**Fill in each blank with the correct answer/output. Assume each statement happens in order and that one statement may affect the next statement. If the code would generate an error, write ERROR in the answer blank for that code.**

**char cOne = 'e';**

**byte** nomNom = 50;

**int** iOne = 500;

**float** downTheRiver = 7.5f;

**double** rainbow = 100.5;

**boolean** stop = false;

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

6. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

7. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

System.out.println(cOne); // LINE 1

System.out.println(nomNom); // LINE 2

System.out.println(rainbow); // LINE 3

iOne = nomNom + 1;

System.out.println(iOne); // LINE 4

System.out.println(stop); // LINE 5

rainbow = downTheRiver;

System.out.println(rainbow); // LINE 6

rainbow = cOne;

System.out.println(rainbow); // LINE 7

iOne = rainbow; // LINE 8