

Formatted Output Homework – Solution
BE-104, Spring '05, Dr. C. S. Tritt
Due Monday, May 2

Given: $a = 1.2345$, $b = 23.4$, $c = 1234567.89$, $x = -3$, $y = 234001$, $z = 12$ and $sv = \text{"Two Words"}$

1. What output, if any (there could be errors), would be produced by each of the following statements?

a. `System.out.printf("%d\n", y*(z - x));`

`3,510,015`

b. `System.out.printf("%d widgets will cost you $%7.2f\n", z, b);`

`12 widgets will cost you $ 23.40. (a better choice for the second specifier would be %.2f).`

c. `System.out.printf("You entered \"%s\"\n", sv);`

`You entered "Two Words"`

d. `System.out.printf("A %.4f V input, resulted in a %.5g V output.\n", a, c);`

`A 1.2345 V input, resulted in a 1.2346e+06 V output.`

2. Write the string `sc` that would cause the following Java statement to produce the indicated output.

a. `System.out.printf(sc, a) → Rounded off, that will be $1.23.`

`"Rounded off, that will be $%.2f.\n"`

b. `System.out.printf(sc, c) → That took about 1,234,568 seconds.`

`"That took about %, .0f seconds.\n"`

c. `System.out.printf(sc, x, z) → The coordinates are: -3, +12.`

`"The coordinates are: %+d, %+d.\n"`

d. `System.out.printf(sc, sv, y) → The novel "Two Words" sold 234,001 copies.`

`"The novel \"%s\" sold %,d copies.\n"`