1. Write assignment statements that perform the following operations with the variables

a, b, and c.

a. Adds 2 to a and stores the result in b.

b. Multiplies b times 4 and stores the result in a.

c. Divides a by 3.14 and stores the result in b.

d. Subtracts 8 from b and stores the result in a.

e. Stores the character ‘K’ in c.

| Input | Process | Output |
| --- | --- | --- |
| Int a, b. Neither are initialized  Char c | 1. B <= a+2 2. A <= b\*4 3. B <= a/3.14 4. A <= b - 8 5. C = ‘K’ | A = Undefined  B = Undefined  C = ‘K’ |

**Answer**

int a, b;

char c;

b = a + 2;

a = b \* 4;

b = a / 3.14;

a = b - 8;

c = 'K';

2. Assume the variables result, w, x, y, and z are all integers, and that w = 5,

x = 4, y = 8, and z = 2. What value will be stored in result in each of the following

Statements?

| Input | Process | Output |
| --- | --- | --- |
| result  w = 5  x = 4  y = 8  z = 2 | 1. result = x+y 2. result = z \* 2 3. result = y-z 4. result = w % 2 | result = 1 |

**Answer**

a. result = x + y;

4 + 5 = 9

b. result = z \* 2;

2 \* 2 = 4

c. result = y / x;

8 / 4 = 2

d. result = y − z;

8 - 2 = 6

e. result = w % 2;

5 mod 2 = 1

3. Modify the following program so it prints two blank lines between each line of text.

public class

{

public static void main(String[] args)

{

System.out.print("This is line 1.");

System.out.print("This is line 2.");

System.out.print("This is line 3.");

System.out.print("This is line 4.");

System.out.println("This is line 5.");

}

}

| Input | Process | Output |
| --- | --- | --- |
| NONE | NONE | This is line 1.  This is line 2.  This is line 3.  This is line 4.  This is line 5. |

**Answer**

public class

{

public static void main(String[] args)

{

System.out.print("This is line 1.\n\n\n");

System.out.print("This is line 2.\n\n\n");

System.out.print("This is line 3.\n\n\n");

System.out.print("This is line 4.\n\n\n");

System.out.println("This is line 5.");

}

}

4. Convert the following pseudocode to Java code. Be sure to declare the appropriate

variables.

Store 20 in the speed variable.

Store 10 in the time variable.

Multiply speed by time and store the result in the distance variable.

Display the contents of the distance variable.

| Input | Process | Output |
| --- | --- | --- |
| Speed = 20  Time = 10 | Distance <= Speed \* Time | Distance = 200 |

public class Question4 {

/\* Store 20 in the speed variable.

Store 10 in the time variable.

Multiply speed by time and store the result in the distance variable.

Display the contents of the distance variable.\*/

public static void main(String[] args)

{

int speed = 20;

int time = 10;

int distance = speed \* time;

System.out.println("Distance: "+ distance);

}

}