**Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Quiz – Object Behavior**

1. Trace through the following code. Below the code, show everything exactly as it would appear on the output screen in the box on the second page.

**public** **class** Lesson4A

{

**private** **int** myNum1, myNum2, myNum3, myNum4;

**public** Lesson4A(**int** s, **int** t, **int** u, **int** v)

{

myNum1 = s;

myNum2 = t;

myNum3 = u;

myNum4 = v;

}

**public** **void** MethodA(**int** j, **int** q, **int** k, **int** o)

{

**int** myNum2 = j \* k + 6;

**int** myNum = 10;

j = k \* o % q;

q = k % q + j \* k \* myNum;

System.*out*.println("In methodA");

System.*out*.println("j = " + j);

System.*out*.println("q = " + q);

System.*out*.println("myNum = " + myNum);

System.*out*.println("myNum = " + myNum);

MethodB(myNum, myNum2, q);

}

**public** **void** MethodB(**int** s,**int** q, **int** r)

{

s = 10/7 + q % s;

q = 3 \* myNum2 % myNum4;

System.*out*.println("In methodB");

System.*out*.println("s = " + s);

System.*out*.println("q = " + q);

MethodC(s, myNum3, r);

}

**public** **void** MethodC(**int** j,**int** q, **int** k)

{

**int** local = 25;

j = 10 / q + k % j;

q = q + j + myNum2 \* myNum3;

k = myNum1 + myNum2 \* myNum3 % j - local;

System.*out*.println("In methodC");

System.*out*.println("j = " + j);

System.*out*.println("q = " + q);

System.*out*.println("k = " + k);

System.*out*.println("local = " + local);

}

**public** **static** **void** main(String[] args)

{

Lesson4A sample = **new** Lesson4A(90, 33, 12, 18);

**int** m = 16;

**int** s = 10;

**int** t = 5;

**int** f = 14;

System.*out*.println("m = " + m);

System.*out*.println("s = " + s);

System.*out*.println("t = " + t);

System.*out*.println("f = " + f);

sample.MethodA(m, 5, 2, 10);

System.*out*.println("m = " + m);

System.*out*.println("s = " + s);

System.*out*.println("t = " + t);

System.*out*.println("f = " + f);

sample.MethodB(m, s, t);

sample.MethodC(f, t, m);

}

}

m = 16

s = 10

t = 5

f = 14

In methodA

j = 0

q = 2

myNum = 10

myNum = 10

In methodB

s = 9

q = 9

In methodC

j = 2

q = 410

k = 65

local = 25

m = 16

s = 10

t = 5

f = 14

In methodB

s = 11

q = 9

In methodC

j = 5

q = 413

k = 66

local = 25

In methodC

j = 4

q = 405

k = 65

local = 25

1. Trace through the following code. Below the code, show everything exactly as it would appear on the output screen in the box on the next page.

**public** **class** Lesson4

{

**private** **int** myNum;

**private** **int** number;

**private** **int** another\_number;

**public** Lesson4(**int** n,**int** m, **int** p)

{

myNum = n;

number = m + n + p;

another\_number = p + m \* n;

}

**public** **void** one (**int** x, **int** k, **int** y)

{

**int** local = 9;

myNum\*=3;

another\_number \*= number;

x = number + another\_number \*k;

print (x, k, number, another\_number, local );

}

**public** **void** two (**int** x, **int** y, **int** z)

{

**int** myNum = 10;

**int** local = 5;

x += myNum;

z = number - x \* y;

print (x, y, myNum, z, local);

}

**public** **void** three (**int** x, **int** y, **int** z)

{

x += myNum;

**int** m = x \* y \* z;

z = m / x % myNum;

y = x%y + z;

print (x, myNum, m, z, y);

}

**public** **void** print (**int** first, **int** second, **int** third, **int** fourth, **int** last)

{

System.*out*.println(first + " " + second + " " + third + " " + fourth + " " + last);

}

**public** **static** **void** main(String[] args)

{

**int** a = 23;

**int** b = 21;

**int** c = 50;

**int** d = 18;

Lesson4 methods = **new** Lesson4(7,10,15);

methods.print(d, a, c, b, a);

methods.one(a,d,c);

methods.print(b, b, c, d, a);

methods.two(a, b, a);

methods.print(c, a, b, d, c);

methods.three(a, b, d);

methods.print(d, b, c, c, a);

}

}

18 23 50 21 23

48992 18 32 2720 9

21 21 50 18 23

33 21 10 -661 5

50 23 21 18 50

44 21 16632 0 2

18 21 50 50 23