1. 1.
2. private static int getPositiveInteger(SimpleReader in, SimpleWriter out) {
3. String s = "";
4. while (!FormatChecker.canParseInt(s)) {
5. out.println("please input a positive integer: ");
6. s = in.nextline();
7. }
8. return Integer.*parseInt*(s);
9. }

2. Statement | Variable Values

Int n = 1;

N > 1

N = 1

I = 2

While (i<5) {

N = 1, 3, 4

I = 2, 3, 4

N = n+i

N = 3, 4, 5

I = 2, 3, 4

I = i + 1

N = 3, 4, 5

I = 3, 4, 5

N = -5

I = -5

2b.

Int i = 2;

I = 2

Double n = 1.0/2.0;

I = 2

N = 0.5

While ( i <= 5) {

I = 2, 3, 4

N = 0.5, 0.75, 0.58

N = n + 1.0 / i;

I = 2,3 , 4

N = 0.75, 0.58, .40

I = i+1;

I = 3, 4, 5

N = 0.75, 0.58, 0.40

I = 5

N = 0.40

2c:

Double x = 1.0;

X = 1.0

Double y= 1.0;

X = 1.0

y= 1.0

while(x<1.8)

X = 1, 1.5, 1.75

Y = 1.0, 0.5, 0.25

Y = y / 2.0;

X = 1.0, 1.5, 1.75

Y = 0.5, 0.25, 0.125

X = x+y

X = 1.5, 1.75, 1.86

Y = 0.5, 0.25, 0.125

x= -1.86

Y = 0.125

2d.

Int x = 3;

X = 3–

Int y = 4;

x= 3;

Y = 4;

While ( y > 0 )

X = 3, 4, 5, 6

Y = 4, 3, 2, 1

X = x + 1;

X = 4, 5, 6, 7

Y = 4, 3, 2, 1

Y = y - 1;

X = 4, 5, 6, 7

Y = 3, 2, 1, 0

X = 7

Y = 0

3A.

Int i = 0;

Int j = 100;

Int num = 2;

While (i <= j) {

I = i + num;

}

3b.

Int i = 0;

Int j = 100;

Int num = 0;

While (i <= j) {

I = num \* num ;

Num+=1;

}

3c. Int i = 2;

Int j = 20;

Int num = 20;

While (num <= j) {

Num = Math.pow(2, 1);

I += 1;

3d.

Int sum = 0;

For (int i = a; i <= b; i++) {

If (i % 2 != 0) {

Sum +=1;

}

}

Return sum;

}

3e.

public static int sumDigitsOddPositionsLeftToRight(int number) {

String numberStr = Integer.toString(number);

int sum = 0;

for (int i = 0; i < numberStr.length(); i += 2) {

sum += Character.getNumericValue(numberStr.charAt(i)); }

return sum;

}

3f

public static int sumDigitsOddPositionsLeftToRight(int number) {

String numberStr = Integer.toString(number);

int sum = 0;

for (int i = 0; i < numberStr.length(); i += 2) {.

sum += Character.getNumericValue(numberStr.charAt(i));

}

return sum;

}

4.

Public static int computeLarger(int num1, int num2)

public static double computeSmallest(double num1, double num2, double num3)

public static boolean isPrime(int number)

public static boolean containsString(String container, String content)

public static double computeBalance(double initialBalance, double annualInterestRate, int years)

public static void printBalance(double initialBalance, double annualInterestRate, int years)

public static void printCalendar(int month, int year)

public static String computeWeekday(int day, int month, int year)

public static int generateRandomInt(int n)

5.

public static void falseSwap(int a, int b) {

int temp = a;

a = b;

b = temp;

}

public static void main(String[] args) {

int x = 3;

int y = 4;

falseSwap(x, y);

System.out.println(x + " " + y);

}

5a. Value doesnt change because value != variable name.

6a.

Public static booleanallTheSame (int x, int y, int z) {

Return (x== y) && (y == z);

}

6b.

Public static boolean allDiffernet(int x, int y, int z) {

Return x != y || y != z || x != z;

}

6c.

Public static boolean sorted(int x, int y, int z) {

Return (x < y ) && (y < z ) ;

}