4. Nasty Unindented Nests

For each of the following pieces of Java code, fill in the following truth table, and draw the corresponding flow chart or flow block diagram.

Conditions a and b have values true and false, and actions Y and Z are simply output statements.

```
1. if ( a ) if (b) Y; else Z;

2. if (a) {if (b) Y;} else Z;

3. if (a) Y; else if (b) Z;

4. if (a && b) Y; else Z;
```

TRUTH TABLE

a	b	1	2	3	4
f	f				
f	t				
t	f				
t	t				

5. Fair Scorer and Data Flows

Consider a system involving five integer scores; they could be grade percentages 1 to 100, or sports values 0 to 10, or any other integers. These five scores, P,Q,R,S,T are input to a program, the lowest score is dropped, and the output is the average of the remaining four scores.

First plan an algorithm as a data flow diagram, using and re-using min3 methods,

then define this min3 method in Java, reusing the min of two values from Math package.

finally, write the body of a program to do the fair score, re-using the min3 method.