



**C. Difficulty calculation tumbling (reference to §18.1 in TUM CoP)**

Double somersaults  
Full in Double-full out (straight)

First somersault:  
Somersault value 0.5  
Twist value 0.4  
0.9

Second somersault:  
Somersault value 0.5  
Twist value 0.8  
1.3

Total element value 2.2

Multiply by 2 (2 x 2.2) 4.4

+ position value 0.8 = 5.2

Triple somersaults  
Triple back (straight, straight, tucked)

First somersault:  
Somersault value 0.5

Second somersault:  
Somersault value 0.5

Third somersault:  
Somersault value 0.5

Total element value 1.5

Multiply by 3 (3 x 1.5) 4.5

+ position value 0.6 = 5.1

**D. Difficulty calculation tumbling - position bonuses**

| Body position              | Single | Double | Triple |
|----------------------------|--------|--------|--------|
| Tuck                       | 0.0    | 0.0    | 0.0    |
| Pike                       | 0.1    | 0.4    | 0.8    |
| Straight                   | 0.1    | 0.8    | 1.6    |
| Straight + pike            | ---    | 0.6    | ---    |
| Straight + tuck + tuck     | ---    | ---    | 0.2    |
| Straight + straight + tuck | ---    | ---    | 0.6    |
| Straight + pike + pike     | ---    | ---    | 1.0    |
| Straight + straight + pike | ---    | ---    | 1.4    |



E. Difficulty tumbling - examples

| Element                   | Symbols | Difficulty |
|---------------------------|---------|------------|
| Round-off                 | (       | 0.2        |
| Handspring                | .f      | 0.2        |
| Flic-flac                 | f       | 0.2        |
| Whipback (tempo salto)    | ^       | 0.3        |
| Back somersault tuck      | - o     | 0.5        |
| Back somersault pike      | - <     | 0.6        |
| Back somersault straight  | - /     | 0.6        |
| Front somersault tuck     | . - o   | 0.6        |
| Front somersault pike     | . - <   | 0.7        |
| Side somersault tuck      | x - o   | 0.6        |
| Side somersault pike      | x - <   | 0.7        |
| Back ss with ½ twist      | 1.      | 0.7        |
| Barani                    | .1      | 0.8        |
| Back ss with 1/1 twist    | 2       | 0.9        |
| Front ss with 1½ twist    | . 3     | 1.3        |
| Back ss with 2/1 twist    | 4       | 1.5        |
| Back ss with 2 ½ twist    | 5       | 1.9        |
| Back ss with 3/1 twist    | 6       | 2.3        |
| Back ss with 3 ½ twists   | 7       | 2.8        |
| Back ss with 4 twists     | 8       | 3.3        |
| Back ss with 5 twists     | 10      | 4.5        |
| Double back ss tuck       | -- o    | 2.0        |
| Double back ss pike       | -- <    | 2.4        |
| Double back ss str + pike | -- /<   | 2.6        |
| Double back ss straight   | -- /    | 2.8        |
| Double front ss tuck      | . -- o  | 2.4        |
| Double front ss pike      | . -- <  | 2.8        |
| Double side ss tuck       | x -- o  | 2.4        |
| Double side ss pike       | x -- <  | 2.8        |

| Element                          | Symbols | Difficulty |
|----------------------------------|---------|------------|
| Half in double tuck              | 1 - o   | 2.4        |
| Half in double pike              | 1 - <   | 2.8        |
| Half out (backwards) tuck        | - 1 o   | 2.4        |
| Half out (backwards) pike        | - 1 <   | 2.8        |
| Half out (backwards) straight    | - 1 /   | 3.2        |
| Half out (forward) tuck          | . - 1 o | 2.8        |
| Half out (forward) pike          | . - 1 < | 3.2        |
| Full in tuck                     | 2 - o   | 2.8        |
| Full in pike                     | 2 - <   | 3.2        |
| Full in straight                 | 2 - /   | 3.6        |
| Full in Full out tuck            | 2 2 o   | 3.6        |
| Full in Full out pike            | 2 2 <   | 4.0        |
| Full in Full out straight        | 2 2 /   | 4.4        |
| Full in Double-full out tuck     | 2 4 o   | 4.4        |
| Full in Double-full out straight | 2 4 /   | 5.2        |
| Double-full in Double-full out / | 4 4 /   | 6.0        |
| Triple back tuck                 | --- o   | 4.5        |
| Triple back / o o                | --- /oo | 4.7        |
| Triple back // o                 | --- //o | 5.1        |
| Triple back <<<                  | --- <   | 5.3        |
| Triple back / <<                 | --- /<< | 5.5        |
| Triple back // <                 | --- //< | 5.9        |
| Triple back / //                 | --- /   | 6.1        |
| Half in Triple tuck              | 1 -- o  | 5.1        |
| Half in Triple pike              | 1 -- <  | 5.9        |
| Full in Triple tuck              | 2 -- o  | 5.7        |
| Full in Triple pike              | 2 -- <  | 6.5        |
| Quadruple back tuck              | ---- o  | 8.0        |
| Full Full Full tuck              | 2 2 2 o | 8.1        |

F. Difficulty calculation tumbling (reference to §15 in TUM CoP)

|                      |        |     |     |      |      |            |     |       |
|----------------------|--------|-----|-----|------|------|------------|-----|-------|
| 1 <sup>st</sup> pass | (      | f   | f   | -- / | ^    | f          | ^   | -- /  |
|                      | Value: | 0.2 | 0.2 | 0.2  | 2.8  | 0.3        | 0.2 | 0.3   |
| 2 <sup>nd</sup> pass | .1     | 2   | f   | f    | -- / | ^          | f   | 2 2 / |
|                      | Value: | 0.8 | 0.9 | 0.2  | 0.2  | 0.0 (rep.) | 0.3 | 0.2   |