

```
<< Combinatorica`
```

```
N[(7220 * 7220 + 2 * 7220 * 760 + 2 * 7220 * 6879 + 2 * 7220 * 1083 + 760 * 760 + 2 * 760 * 6879) /  
(16 000 * 16 000)]
```

```
1 - N[(7220 * 7220 + 2 * 7220 * 760 + 2 * 7220 * 6879 + 2 * 7220 * 1083 + 760 * 760 + 2 * 760 * 6879) /  
(16 000 * 16 000)]
```

```
N[(7220 * 7220 + 2 * 7220 * 760 + 2 * 7220 * 6879 + 760 * 760) / (16 000 * 16 000)]
```

```
1 - N[(7220 * 7220 + 2 * 7220 * 760 + 2 * 7220 * 6879 + 760 * 760) / (16 000 * 16 000)]
```

```
0.738702
```

```
0.261298
```

```
0.63677
```

```
0.36323
```

```
In[99]:= N[(2 * 6879 + 2 * 1083 + 2 * 57 + 1 + 2 * 57 * 1083 + 57 * 57) / (16 000 * 16 000)]  
N[(7220^3 + 3 * 7220^2 * 760 + 3 * 7220 * 760^2 + 3 * 7220^2 * 6879) / (16 000^3)]
```

```
Out[99]= 0.000557617
```

```
Out[100]= 0.386598
```

```
N[(2 * 7220 + 2.5 * 760 + 3 * 6789 + 3.5 * 1083 + 4 * 57 + 4.5 * 1) / 16 000]
```

```
2.54563
```

```
In[101]:= (*Player two attacks after Normal Kick-----*)  
x = 140;  
  
numerators = {7220, 760, 6879, 1083, 57, 1};  
damage = {2 x, 2.5 x, 3 x, 3.5 x, 4 x, 4.5 x};  
  
d = 16 000;  
  
cutoff = 824; (*health after Normal Kick*)  
  
cum = 0;  
  
For[i = 1, i ≤ 6, i++,  
  For[j = 1, j ≤ 6, j++,  
    {  
      If[damage[[i]] + damage[[j]] ≤ cutoff,  
        {  
          cum = cum + ((numerators[[i]] * numerators[[j]]) / d^2);  
          Print[damage[[i]] + damage[[j]]];  
        }  
      ];  
    }  
  ];  
];  
Print[N[cum], " ", 1 - N[cum]]
```

```

560
630.
700
770.
630.
700.
770.
700
770.
770.
0.738702 0.261298

In[108]:= (*Player two attacks after Critical Kick-----*)
x = 140;

numerators = {7220, 760, 6879, 1083, 57, 1};
damage = {2 x, 2.5 x, 3 x, 3.5 x, 4 x, 4.5 x};

d = 16000;

cutoff = 719; (*health after Critical Kick*)

cum = 0;

For[i = 1, i ≤ 6, i++,
  For[j = 1, j ≤ 6, j++,
    {
      If[damage[[i]] + damage[[j]] ≤ cutoff,
        {
          cum = cum + ((numerators[[i]] * numerators[[j]]) / d^2);
          Print[damage[[i]] + damage[[j]]];
        }
      ];
    }
  ];
];
Print[N[cum], " ", 1 - N[cum]]

560
630.
700
630.
700.
700
0.63677 0.36323

```

```

In[115]:= (*SBH two attacks-----*)
x = 140;

numerators = {7220, 760, 6879, 1083, 57, 1};
damage = {2 x, 2.5 x, 3 x, 3.5 x, 4 x, 4.5 x};

d = 16 000;

cutoff = 1034; (*full health Anomalus*)

cum = 0;

For[i = 1, i ≤ 6, i++,
  For[j = 1, j ≤ 6, j++,
    {
      If[damage[[i]] + damage[[j]] >= cutoff,
        {
          cum = cum + ((numerators[[i]] * numerators[[j]]) / d^2);
          Print[damage[[i]], " ", damage[[j]], " ", damage[[i]] + damage[[j]]];
        }
      ];
    }
  ];
];
Print[N[cum], " ", 1 - N[cum]]
420 630. 1050.
490. 560 1050.
490. 630. 1120.
560 490. 1050.
560 560 1120
560 630. 1190.
630. 420 1050.
630. 490. 1120.
630. 560 1190.
630. 630. 1260.
0.000557617 0.999442

```

```

(*SBH three
attacks-----*)
x = 140;

numerators = {7220, 760, 6879, 1083, 57, 1};
damage = {2 x, 2.5 x, 3 x, 3.5 x, 4 x, 4.5 x};

d = 16 000;

cutoff = 1034; (*full health Anomalus*)

round3kill = 0;
round4kill = 0;
round4live = 0;

For[i = 1, i ≤ 6, i++,
  For[j = 1, j ≤ 6, j++,
    {
      If[damage[[i]] + damage[[j]] ≥ cutoff,
        {
          round3kill = round3kill + ((numerators[[i]] * numerators[[j]]) / d^2);
          (*Print["ThreeKill", damage[[i]], " ", damage[[j]], " ", damage[[i]] + damage[[j]]];*)
        }
      ,
      {
        For[k = 1, k ≤ 6, k++,
          {
            If[damage[[i]] + damage[[j]] + damage[[k]] ≥ cutoff,
              {
                round4kill = round4kill +
                  ((numerators[[i]] * numerators[[j]] * numerators[[k]]) / d^3);
                (*Print["FourKill", damage[[i]], " ", damage[[j]], " ", damage[[k]],
                  " ", damage[[i]] + damage[[j]] + damage[[k]]];*)
              }
            ,
            {
              round4live = round4live +
                ((numerators[[i]] * numerators[[j]] * numerators[[k]]) / d^3);
              Print["NOKILL", damage[[i]], " ", damage[[j]], " ", damage[[k]],
                " ", damage[[i]] + damage[[j]] + damage[[k]]];
              Print[N[(numerators[[i]] * numerators[[j]] * numerators[[k]]) / d^3]];
            }
          }
        ];
      }
    ]
  ];
];
];
];
];
Print[N[round3kill], " ", N[round4kill], " ", N[round4live]];
Print[N[round3kill] + N[round4kill] + N[round4live]];

```

NOKILL280 280 280 840
0.0918865
NOKILL280 280 350. 910.
0.00967226
NOKILL280 280 420 980
0.0875467
NOKILL280 350. 280 910.
0.00967226
NOKILL280 350. 350. 980.
0.00101813
NOKILL280 420 280 980
0.0875467
NOKILL350. 280 280 910.
0.00967226
NOKILL350. 280 350. 980.
0.00101813
NOKILL350. 350. 280 980.
0.00101813
NOKILL420 280 280 980
0.0875467
0.000557617 0.612845 0.386598
1.