

Let a primitive pythagorean triangle (a,b,c)

$f(x, m) =$  the number of inversions in  $\{ax \bmod m\}$  for  $0 < a < m$  assuming  $\gcd(x, m) = 1$

$F(C_i, C_j)$  where  $C_i, C_j$  are distinct sets of points

$$f(x, tx + y) = t \times F(C_0) + \frac{t \times (t - 1)}{2} \times F(C_0, C_1) + t \times F(C_0, C_y) + F(C_y)$$