Basic

$Cn = (-n\hat{}2, 0):\ y\hat{}2 = x\hat{}3 - n\hat{}2 * x.\ ;\ also\ En.$

$pqrs(p, q, r, s):\quad n = pq = rs,\ s = p + q + r.$

$xyw(x, y, w)\ :\quad n\hat{}2 = x * w,\ w = x + y\hat{}2.$

$gnp(g, n, p)\quad :\quad g\hat{}2 = n\hat{}2 - p\hat{}4.$

Relations

$1\ pqrs\ -> \quad xyw(\ pr,\ q + r,\ qs),\ xyw(qr, p + r, ps).$

$1\ pqrs\ -> 1\ Triangle\qquad (p + r,\ q + r,\ p + q\ ).$

$1\ xyw\ -> 2\ Cn\ points.\qquad P(\ -x, xy)\ ,\ P(w, wy).$

$1\ xyw(x, y, w)\ -> 1\ Triangle(\ y,\ 2n/y\ ,\ h);$

$$h:\ h\hat{}2 = y\hat{}2 + (\ 2n/y\ )\hat{}2.$$

Cn Point equivalence:

$P(-a, b)\ -> P(n\hat{}2/a,\ n\hat{}2 * b/a\hat{}2\ )$

$P(\ +c,\ d) -> P(\ -n\hat{}2/c,\ n\hat{}2 * d/c\hat{}2)$

$1\ pqrs\ -> 4\ points\ curve\ Cn:$

$P(\ -pr,\ pr(q + r)),\ P(qs,\ qs(q + r)).$

$P(-qr,\ qr(p + r)),\ P(ps,\ ps * (p + r)).$

$1\ pqrs\ -> 1\ triad\ squares:\quad (\ q - p,\ \ p + q,\ \ r + s\ )$

$GNP\ form:\quad g\hat{}2 = n\hat{}2 - p\hat{}4.$

$GNP\ Triangle\ Q\ sides\ (\ g/p,\ 2np/g,\ (g\hat{}2 + 2p\hat{}4)/pg\ ).$

$GNP\ Point\ (-p\hat{}2,\ pg).$

$GNP\ -> \ xyw\ form(\ p\hat{}2, g/p,\ (n/p)\hat{}2\ ).$