

```
(%i1) n:113039471121744737372964187079929804969763672651365059214523629388434304736625810248570795391189514511976830070922050605223;
(%o1) 113039471121744737372964187079[63 digits]189514511976830070922050605223

(%i2) e:38714275190077500654575227140835036432673929320002838491591578481453917139289427758571871329553635376218889541717681481167;
(%o2) 387142751900775006545752271408[62 digits]553635376218889541717681481167

(%i3) ls:cf(e/n);
(%o3) [0,2,1,11,2,9,2,26,1,1,1,2,2,20,2,3,3,1,6,22,4,1,2,2,4,4,34,1,2,1,2,2,9747666258944239926856862515,1,5,1,17,3,2,1,1,3,2,3,2,2,1,1,4,48,1,2,3,2,73,1,1,4,1,1,4,1,1,10,1,1,1,6,5,11,1,5]1,4,1,1,1,9,1,6,3,12,1,119,1,21,1,1,3,3,1,5,7,22,2,573,2,2,1,3,272,9,1,3,1133,2,1,3,1,2,3,6,6,3,1,1,1,3,1,1,2,2,3,6,2,1,4,1,1,7,1,1,1,1,5,1,2,6,2,1,3,13,7,1,1,1,3,2,1,1,1,2,2,1,1,1,5,3,11,2,19,2,5,2,1,1,1,1,1,13,2,3,3,2,1,4,1,3,2,3,1,307,1,1,1,2]

(%i4) from_cf_n(L, n) := ratsimp(cfdisrep(makelist(L[i], i, 1, n)));
(%o4) from_cf_n(L, n) := ratsimp(cfdisrep(makelist(L[i], i, 1, n)))

(%i5) from_cf_n(ls, 32);
(%o5) 13646408196949262 / 39845322112344543

(%i6) k:ratnumer(%);
(%o6)/R/ 13646408196949262

(%i7) d:ratdenom(%th(2));
(%o7)/R/ 39845322112344543

(%i8) C:(e-d-1)/k;
(%o8)/R/ 113039471121744737372964187079[63 digits]701947261863802065358232287640

(%i9) f(x):=x^2-(n-C+1)*x+n;
(%o9) f(x):=x^2-(n-C+1)*x+n

(%i10) r:solve(f(x));
(%o10) [x=9843321352430274837324391759763763492576975243694875608454221, x=11483874911168653976878457053057724074673137784310688209863363]

(%i11) p:rhs(r[1]);
(%o11) 9843321352430274837324391759763763492576975243694875608454221

(%i12) q:rhs(r[2]);
(%o12) 11483874911168653976878457053057724074673137784310688209863363
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(%i14) d:inv_mod(e, pn);
(%o14) 39845322112344543

(%i15) m:666;
(%o15) 666

(%i16) c:power_mod(m, e, n);
(%o16) 104881198676409788157621798232[62 digits]265712275685435188770653961119

(%i17) m2:power_mod(c, d, n);
(%o17) 666
```