

```

pp[n_] := 4 Sum[1, {j, 1, Floor[n]}, {k, 1, Floor[n^2 - j^2]}]

pp[100]

2 646 600

N[Pi 100^2]

31 415.9

bin[z_, k_] := Product[z - j, {j, 0, k - 1}] / k!
FI[n_] := FactorInteger[n]; FI[1] := {}
dz[n_, z_] := dz[n, z] = Product[(-1)^p[[2]] Binomial[-z, p[[2]]], {p, FI[n]}]
tt[n_] := Sum[dz[m, -1], {j, 1, n}, {k, 1, n / j}, {l, 1, n / (j k)}, {m, 1, (n / (j k l))^(1 / 2)}]
ttb[n_] := Sum[dz[j, 3] dz[m, -1], {j, 1, n}, {m, 1, (n / j)^(1 / 2)}]
tta[n_] := Sum[dz[j^2, 2], {j, 1, n}]
td[n_] := Sum[dz[o, -1], {j, 1, n}, {k, 1, n / j},
  {l, 1, n / (j k)}, {m, 1, n / (j k l)}, {o, 1, (n / (j k l m))^(1 / 2)}]
tdb[n_] := Sum[dz[j, 4] dz[o, -1], {j, 1, n}, {o, 1, (n / j)^(1 / 2)}]
tda[n_] := Sum[dz[j, 2]^2, {j, 1, n}]

tt[100]

1194

tta[100]

1194

ttb[100]

1194

td[100]

3046

tda[100]

3046

tdb[100]

3046

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