

```

vv := {0, 1, 1, 1, 1, 1, 1, 8, 8, 8, 8, 19, 19, 32,
      32, 32, 32, 49, 49, 68, 68, 68, 68, 91, 91, 91, 91, 91, 91, 120}
vv2 := {0, 1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 4, 4, 4, 4, 5, 5, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 8}
wheelSize := wheelSize = 30
wheelEnd := wheelEnd = vv2[[Length[vv2]]]
FF[n_] :=
  (vv[[Mod[n, wheelSize] + 1]] + wheelSize vv2[[Mod[n, wheelSize] + 1]] Floor[n / wheelSize]) +
  (wheelEnd wheelSize) / 2 Floor[ $\frac{n}{\text{wheelSize}}$ ]^2
FH[n_] := Sum[If[Mod[j, 2] == 0 || Mod[j, 3] == 0 || Mod[j, 5] == 0, 0, j], {j, 1, n}]
Table[{n, a = FH[n], b = FF[n], (a - b)}, {n, 1, 100}] // TableForm

```

| | | | |
|----|-----|-----|---|
| 1 | 1 | 1 | 0 |
| 2 | 1 | 1 | 0 |
| 3 | 1 | 1 | 0 |
| 4 | 1 | 1 | 0 |
| 5 | 1 | 1 | 0 |
| 6 | 1 | 1 | 0 |
| 7 | 8 | 8 | 0 |
| 8 | 8 | 8 | 0 |
| 9 | 8 | 8 | 0 |
| 10 | 8 | 8 | 0 |
| 11 | 19 | 19 | 0 |
| 12 | 19 | 19 | 0 |
| 13 | 32 | 32 | 0 |
| 14 | 32 | 32 | 0 |
| 15 | 32 | 32 | 0 |
| 16 | 32 | 32 | 0 |
| 17 | 49 | 49 | 0 |
| 18 | 49 | 49 | 0 |
| 19 | 68 | 68 | 0 |
| 20 | 68 | 68 | 0 |
| 21 | 68 | 68 | 0 |
| 22 | 68 | 68 | 0 |
| 23 | 91 | 91 | 0 |
| 24 | 91 | 91 | 0 |
| 25 | 91 | 91 | 0 |
| 26 | 91 | 91 | 0 |
| 27 | 91 | 91 | 0 |
| 28 | 91 | 91 | 0 |
| 29 | 120 | 120 | 0 |
| 30 | 120 | 120 | 0 |
| 31 | 151 | 151 | 0 |
| 32 | 151 | 151 | 0 |
| 33 | 151 | 151 | 0 |
| 34 | 151 | 151 | 0 |
| 35 | 151 | 151 | 0 |
| 36 | 151 | 151 | 0 |
| 37 | 188 | 188 | 0 |
| 38 | 188 | 188 | 0 |
| 39 | 188 | 188 | 0 |
| 40 | 188 | 188 | 0 |
| 41 | 229 | 229 | 0 |
| 42 | 229 | 229 | 0 |
| 43 | 272 | 272 | 0 |
| 44 | 272 | 272 | 0 |

| | | | |
|-----|------|------|---|
| 45 | 272 | 272 | 0 |
| 46 | 272 | 272 | 0 |
| 47 | 319 | 319 | 0 |
| 48 | 319 | 319 | 0 |
| 49 | 368 | 368 | 0 |
| 50 | 368 | 368 | 0 |
| 51 | 368 | 368 | 0 |
| 52 | 368 | 368 | 0 |
| 53 | 421 | 421 | 0 |
| 54 | 421 | 421 | 0 |
| 55 | 421 | 421 | 0 |
| 56 | 421 | 421 | 0 |
| 57 | 421 | 421 | 0 |
| 58 | 421 | 421 | 0 |
| 59 | 480 | 480 | 0 |
| 60 | 480 | 480 | 0 |
| 61 | 541 | 541 | 0 |
| 62 | 541 | 541 | 0 |
| 63 | 541 | 541 | 0 |
| 64 | 541 | 541 | 0 |
| 65 | 541 | 541 | 0 |
| 66 | 541 | 541 | 0 |
| 67 | 608 | 608 | 0 |
| 68 | 608 | 608 | 0 |
| 69 | 608 | 608 | 0 |
| 70 | 608 | 608 | 0 |
| 71 | 679 | 679 | 0 |
| 72 | 679 | 679 | 0 |
| 73 | 752 | 752 | 0 |
| 74 | 752 | 752 | 0 |
| 75 | 752 | 752 | 0 |
| 76 | 752 | 752 | 0 |
| 77 | 829 | 829 | 0 |
| 78 | 829 | 829 | 0 |
| 79 | 908 | 908 | 0 |
| 80 | 908 | 908 | 0 |
| 81 | 908 | 908 | 0 |
| 82 | 908 | 908 | 0 |
| 83 | 991 | 991 | 0 |
| 84 | 991 | 991 | 0 |
| 85 | 991 | 991 | 0 |
| 86 | 991 | 991 | 0 |
| 87 | 991 | 991 | 0 |
| 88 | 991 | 991 | 0 |
| 89 | 1080 | 1080 | 0 |
| 90 | 1080 | 1080 | 0 |
| 91 | 1171 | 1171 | 0 |
| 92 | 1171 | 1171 | 0 |
| 93 | 1171 | 1171 | 0 |
| 94 | 1171 | 1171 | 0 |
| 95 | 1171 | 1171 | 0 |
| 96 | 1171 | 1171 | 0 |
| 97 | 1268 | 1268 | 0 |
| 98 | 1268 | 1268 | 0 |
| 99 | 1268 | 1268 | 0 |
| 100 | 1268 | 1268 | 0 |

```

FH[n_] := Sum[ If[Mod[j, 2] == 0 || Mod[j, 3] == 0 || Mod[j, 5] == 0, 0, j], {j, 1, n}]
FH2[n_] := Sum[ If[Mod[j, 2] == 0 || Mod[j, 3] == 0 || Mod[j, 5] == 0, 0, 1], {j, 1, n}]
Table[FH2[n], {n, 1, 30}]
Table[FH[n], {n, 1, 30}]

{1, 1, 1, 1, 1, 1, 2, 2, 2, 2, 3, 3, 4, 4, 4, 4, 5, 5, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 8, 8}

{1, 1, 1, 1, 1, 1, 8, 8, 8, 8, 19, 19, 32, 32, 32,
 32, 49, 49, 68, 68, 68, 68, 91, 91, 91, 91, 91, 91, 120, 120}

```