

> # number factorize PG: FactorSum= $X^h$  by H•E 2019 – 12 – 8 :

>

>  $hc := 0$  :for  $n$  from 2 to 10000 do  $ft := n$  :  $FFS := 0$  :  $Fs := 0$  :  $fp := 2$  :  $nc := 0$  :  $ff := 0$  :  
 for  $p$  from 1 to  $ft$  do if  $ft = 1$  then break elif  $ft \bmod fp = 0$  then  $nc := nc + 1$  :  $ft := \frac{ft}{fp}$  :

$FT \parallel nc := fp$  :  $Fs := Fs + fp$  :  $FFT \parallel nc := [fp]^2$  :  $FFS := FFS + fp^2$  else  $fp :=$

$nextprime(fp)$  fi:od:  $NF := [seq(FT \parallel j, j = 1 .. nc)]$  : if  $ff = 1$  then print( (  $n$  ) [ Factors  
 $= NF, Fsum = Fs$  ] ) fi: for  $h$  from 2 to floor(log[2]( $n$ )) do if  $ff = 0$

and floor(  $evalf(Fs^{\frac{1}{h}})$  ) <sup>$h$</sup>  =  $Fs$  then  $hc := hc + 1$  : print( ) : print( FACTORSUM

=  $X^h$  [  $HC = hc$  ] ) : print(  $n$  [  $FS$  [  $NF = Fsum$  [  $Fs$  ] ] = [  $simplify(Fs^{\frac{1}{h}})$  ] <sup>$h$</sup>  ] ) ) fi: if  $ff = 1$  and

not isprime( $n$ ) and floor(  $evalf(FFS^{\frac{1}{h}})$  ) <sup>$h$</sup>  =  $FFS$  then  $hc := hc + 1$  :

print(  $n$  [  $FFS$  [  $seq(FFT \parallel j, j = 1 .. nc)$  ] ] = [  $simplify(FFS^{\frac{1}{h}})$  ] <sup>$h$</sup>  ] ) fi:od:od:

$$FACTORSUM = X^2 [HC = 1]$$

$${}^4_{FS} [2, 2] = Fsum_4 = [2]^2$$

$$FACTORSUM = X^2 [HC = 2]$$

$${}^{14}_{FS} [2, 7] = Fsum_9 = [3]^2$$

$$FACTORSUM = X^3 [HC = 3]$$

$${}^{15}_{FS} [3, 5] = Fsum_8 = [2]^3$$

$$FACTORSUM = X^3 [HC = 4]$$

$${}^{16}_{FS} [2, 2, 2, 2] = Fsum_8 = [2]^3$$

$$FACTORSUM = X^3 [HC = 5]$$

$${}^{18}_{FS} [2, 3, 3] = Fsum_8 = [2]^3$$

$$FACTORSUM = X^2 [HC = 6]$$

$${}^{20}_{FS} [2, 2, 5] = Fsum_9 = [3]^2$$

$$FACTORSUM = X^2 [HC = 7]$$

$$24_{FS} [2, 2, 2, 3] = Fsum_9 = [3]^2$$

$$FACTORSUM = X^2 [HC = 8]$$

$$27_{FS} [3, 3, 3] = Fsum_9 = [3]^2$$

$$FACTORSUM = X^2 [HC = 9]$$

$$39_{FS} [3, 13] = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 10]$$

$$39_{FS} [3, 13] = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 11]$$

$$46_{FS} [2, 23] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 12]$$

$$55_{FS} [5, 11] = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 13]$$

$$55_{FS} [5, 11] = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 14]$$

$$66_{FS} [2, 3, 11] = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 15]$$

$$66_{FS} [2, 3, 11] = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^5 [HC = 16]$$

$$87_{FS} [3, 29] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 17]$$

$$92_{FS}^{[2, 2, 23]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 18]$$

$$94_{FS}^{[2, 47]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 19]$$

$$98_{FS}^{[2, 7, 7]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 20]$$

$$98_{FS}^{[2, 7, 7]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 21]$$

$$140_{FS}^{[2, 2, 5, 7]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 22]$$

$$140_{FS}^{[2, 2, 5, 7]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 23]$$

$$152_{FS}^{[2, 2, 2, 19]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 24]$$

$$155_{FS}^{[5, 31]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 25]$$

$$158_{FS}^{[2, 79]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 26]$$

$$158_{FS}^{[2, 79]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 27]$$

$$168_{FS}^{[2, 2, 2, 3, 7]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 28]$$

$$168_{FS}^{[2, 2, 2, 3, 7]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 29]$$

$$171_{FS}^{[3, 3, 19]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 30]$$

$$183_{FS}^{[3, 61]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 31]$$

$$183_{FS}^{[3, 61]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 32]$$

$$183_{FS}^{[3, 61]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 33]$$

$$186_{FS}^{[2, 3, 31]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 34]$$

$$189_{FS}^{[3, 3, 3, 7]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 35]$$

$$189_{FS}^{[3, 3, 3, 7]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 36]$$

$$200_{FS}^{[2, 2, 2, 5, 5]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 37]$$

$$200_{FS}^{[2, 2, 2, 5, 5]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 38]$$

$$203_{FS}^{[7, 29]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 39]$$

$$225_{FS}^{[3, 3, 5, 5]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 40]$$

$$225_{FS}^{[3, 3, 5, 5]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 41]$$

$$240_{FS}^{[2, 2, 2, 2, 3, 5]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 42]$$

$$240_{FS}^{[2, 2, 2, 2, 3, 5]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^5 [HC = 43]$$

$$247_{FS}^{[13, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 44]$$

$$255_{FS}^{[3, 5, 17]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 45]$$

$$256_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 46]$$

$$256_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 47]$$

$$270_{FS}^{[2, 3, 3, 3, 5]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 48]$$

$$270_{FS}^{[2, 3, 3, 3, 5]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 49]$$

$$272_{FS}^{[2, 2, 2, 2, 17]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 50]$$

$$285_{FS}^{[3, 5, 19]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 51]$$

$$288_{FS}^{[2, 2, 2, 2, 3, 3]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 52]$$

$$288_{FS}^{[2, 2, 2, 2, 3, 3]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 53]$$

$$290_{FS}^{[2, 5, 29]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 54]$$

$$291_{FS}^{[3, 97]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 55]$$

$$295_{FS}^{[5, 59]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 56]$$

$$295_{FS}^{[5, 59]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 57]$$

$$295_{FS}^{[5, 59]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 58]$$

$$299_{FS}^{[13, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 59]$$

$$304_{FS}^{[2, 2, 2, 2, 19]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 60]$$

$$306_{FS}^{[2, 3, 3, 17]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 [HC = 61]$$

$$322_{FS}^{[2, 7, 23]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 62]$$

$$323_{FS}^{[17, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 63]$$

$$324_{FS}^{[2, 2, 3, 3, 3, 3]} = Fsum_{16} = [4]^2$$

$$FACTORSUM = X^4 [HC = 64]$$

$$324_{FS}^{[2, 2, 3, 3, 3, 3]} = Fsum_{16} = [2]^4$$

$$FACTORSUM = X^2 [HC = 65]$$

$$334_{FS}^{[2, 167]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^3 [HC = 66]$$

$$342_{FS}^{[2, 3, 3, 19]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 67]$$

$$344_{FS} [2, 2, 2, 43] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 68]$$

$$348_{FS} [2, 2, 3, 29] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 69]$$

$$354_{FS} [2, 3, 59] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 70]$$

$$354_{FS} [2, 3, 59] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 71]$$

$$354_{FS} [2, 3, 59] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 72]$$

$$357_{FS} [3, 7, 17] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 73]$$

$$363_{FS} [3, 11, 11] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 74]$$

$$387_{FS} [3, 3, 43] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 75]$$

$$418_{FS} [2, 11, 19] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 76]$$

$$425_{FS} [5, 5, 17] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 77]$$

$$429_{FS} [3, 11, 13] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^5 [HC = 78]$$

$$442_{FS} [2, 13, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 79]$$

$$446_{FS} [2, 223] = Fsum_{225} = [15]^2$$

$$FACTORSUM = X^2 [HC = 80]$$

$$455_{FS} [5, 7, 13] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 [HC = 81]$$

$$460_{FS} [2, 2, 5, 23] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 82]$$

$$482_{FS} [2, 241] = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 83]$$

$$506_{FS} [2, 11, 23] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 84]$$

$$510_{FS} [2, 3, 5, 17] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 85]$$

$$539_{FS} [7, 7, 11] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 86]$$

$$544_{FS} [2, 2, 2, 2, 17] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 87]$$

$$546_{FS} [2, 3, 7, 13] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 [HC = 88]$$

$$552_{FS} [2, 2, 2, 3, 23] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 89]$$

$$578_{FS} [2, 17, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 90]$$

$$579_{FS} [3, 193] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 91]$$

$$583_{FS} [11, 53] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 92]$$

$$583_{FS} [11, 53] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 93]$$

$$583_{FS} [11, 53] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 94]$$

$$605_{FS} [5, 11, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 95]$$

$$612_{FS} [2, 2, 3, 3, 17] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 96]$$

$$615_{FS} [3, 5, 41] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 97]$$

$$621_{FS}^{[3, 3, 3, 23]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 98]$$

$$637_{FS}^{[7, 7, 13]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 99]$$

$$650_{FS}^{[2, 5, 5, 13]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 100]$$

$$656_{FS}^{[2, 2, 2, 2, 41]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 101]$$

$$695_{FS}^{[5, 139]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 102]$$

$$718_{FS}^{[2, 359]} = Fsum_{361} = [19]^2$$

$$FACTORSUM = X^3 [HC = 103]$$

$$726_{FS}^{[2, 3, 11, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 104]$$

$$738_{FS}^{[2, 3, 3, 41]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 105]$$

$$748_{FS}^{[2, 2, 11, 17]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 106]$$

$$770_{FS}^{[2, 5, 7, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 107]$$

$$780_{FS} [2, 2, 3, 5, 13] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 108]$$

$$799_{FS} [17, 47] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 109]$$

$$799_{FS} [17, 47] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 110]$$

$$799_{FS} [17, 47] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 111]$$

$$832_{FS} [2, 2, 2, 2, 2, 13] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 112]$$

$$834_{FS} [2, 3, 139] = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 113]$$

$$878_{FS} [2, 439] = Fsum_{441} = [21]^2$$

$$FACTORSUM = X^3 [HC = 114]$$

$$910_{FS} [2, 5, 7, 13] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 115]$$

$$924_{FS} [2, 2, 3, 7, 11] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 116]$$

$$936_{FS} [2, 2, 2, 3, 3, 13] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 117]$$

$$943_{FS}^{[23, 41]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 118]$$

$$943_{FS}^{[23, 41]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 119]$$

$$943_{FS}^{[23, 41]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 120]$$

$$955_{FS}^{[5, 191]} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^5 [HC = 121]$$

$$956_{FS}^{[2, 2, 239]} = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 122]$$

$$959_{FS}^{[7, 137]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 123]$$

$$979_{FS}^{[11, 89]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 124]$$

$$988_{FS}^{[2, 2, 13, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 125]$$

$$1053_{FS}^{[3, 3, 3, 3, 13]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 126]$$

$$1055_{FS}^{[5, 211]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^5 [HC = 127]$$

$$1064_{FS}^{[2, 2, 2, 7, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 128]$$

$$1078_{FS}^{[2, 7, 7, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 129]$$

$$1092_{FS}^{[2, 2, 3, 7, 13]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 130]$$

$$1095_{FS}^{[3, 5, 73]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 131]$$

$$1095_{FS}^{[3, 5, 73]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 132]$$

$$1100_{FS}^{[2, 2, 5, 5, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 133]$$

$$1146_{FS}^{[2, 3, 191]} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 134]$$

$$1168_{FS}^{[2, 2, 2, 2, 73]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 135]$$

$$1168_{FS}^{[2, 2, 2, 2, 73]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 136]$$

$$1191_{FS}^{[3, 397]} = Fsum_{400} = [20]^2$$

$$FACTORSUM = X^5 [HC = 137]$$

$$1197 \text{ }_{FS}^{[3, 3, 7, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 138]$$

$$1255 \text{ }_{FS}^{[5, 251]} = Fsum_{256} = [16]^2$$

$$FACTORSUM = X^4 [HC = 139]$$

$$1255 \text{ }_{FS}^{[5, 251]} = Fsum_{256} = [4]^4$$

$$FACTORSUM = X^8 [HC = 140]$$

$$1255 \text{ }_{FS}^{[5, 251]} = Fsum_{256} = [2]^8$$

$$FACTORSUM = X^3 [HC = 141]$$

$$1266 \text{ }_{FS}^{[2, 3, 211]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 142]$$

$$1288 \text{ }_{FS}^{[2, 2, 2, 7, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 143]$$

$$1295 \text{ }_{FS}^{[5, 7, 37]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 144]$$

$$1300 \text{ }_{FS}^{[2, 2, 5, 5, 13]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 145]$$

$$1304 \text{ }_{FS}^{[2, 2, 2, 163]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 146]$$

$$1314 \text{ }_{FS}^{[2, 3, 3, 73]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 147]$$

$$1314_{FS}^{[2, 3, 3, 73]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 148]$$

$$1320_{FS}^{[2, 2, 2, 3, 5, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 [HC = 149]$$

$$1352_{FS}^{[2, 2, 2, 13, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 150]$$

$$1370_{FS}^{[2, 5, 137]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 151]$$

$$1372_{FS}^{[2, 2, 7, 7, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 152]$$

$$1408_{FS}^{[2, 2, 2, 2, 2, 2, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 153]$$

$$1411_{FS}^{[17, 83]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^5 [HC = 154]$$

$$1425_{FS}^{[3, 5, 5, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 155]$$

$$1449_{FS}^{[3, 3, 7, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 156]$$

$$1454_{FS}^{[2, 727]} = Fsum_{729} = [27]^2$$

$$FACTORSUM = X^3 [HC = 157]$$

$$1454_{FS}^{[2, 727]} = Fsum_{729} = [9]^3$$

$$FACTORSUM = X^6 [HC = 158]$$

$$1454_{FS}^{[2, 727]} = Fsum_{729} = [3]^6$$

$$FACTORSUM = X^2 [HC = 159]$$

$$1467_{FS}^{[3, 3, 163]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 160]$$

$$1479_{FS}^{[3, 17, 29]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 161]$$

$$1484_{FS}^{[2, 2, 7, 53]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 162]$$

$$1484_{FS}^{[2, 2, 7, 53]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 163]$$

$$1484_{FS}^{[2, 2, 7, 53]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 164]$$

$$1485_{FS}^{[3, 3, 3, 5, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 165]$$

$$1491_{FS}^{[3, 7, 71]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 166]$$

$$1491_{FS}^{[3, 7, 71]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 167]$$

$$1506_{FS}^{[2, 3, 251]} = Fsum_{256} = [16]^2$$

$$FACTORSUM = X^4 [HC = 168]$$

$$1506_{FS}^{[2, 3, 251]} = Fsum_{256} = [4]^4$$

$$FACTORSUM = X^8 [HC = 169]$$

$$1506_{FS}^{[2, 3, 251]} = Fsum_{256} = [2]^8$$

$$FACTORSUM = X^5 [HC = 170]$$

$$1520_{FS}^{[2, 2, 2, 2, 5, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 171]$$

$$1521_{FS}^{[3, 3, 13, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 172]$$

$$1527_{FS}^{[3, 509]} = Fsum_{512} = [8]^3$$

$$FACTORSUM = X^9 [HC = 173]$$

$$1527_{FS}^{[3, 509]} = Fsum_{512} = [2]^9$$

$$FACTORSUM = X^3 [HC = 174]$$

$$1540_{FS}^{[2, 2, 5, 7, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 175]$$

$$1554_{FS}^{[2, 3, 7, 37]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 176]$$

$$1560_{FS}^{[2, 2, 2, 3, 5, 13]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 177]$$

$$1584_{FS}^{FS} [2, 2, 2, 2, 3, 3, 11] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 178]$$

$$1587_{FS}^{FS} [3, 23, 23] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 179]$$

$$1634_{FS}^{FS} [2, 19, 43] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 180]$$

$$1634_{FS}^{FS} [2, 19, 43] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 181]$$

$$1634_{FS}^{FS} [2, 19, 43] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 182]$$

$$1644_{FS}^{FS} [2, 2, 3, 137] = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^3 [HC = 183]$$

$$1664_{FS}^{FS} [2, 2, 2, 2, 2, 2, 13] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 184]$$

$$1672_{FS}^{FS} [2, 2, 2, 11, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 185]$$

$$1678_{FS}^{FS} [2, 839] = Fsum_{841} = [29]^2$$

$$FACTORSUM = X^2 [HC = 186]$$

$$1695_{FS}^{FS} [3, 5, 113] = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 187]$$

$$1703 \quad {}_{FS}^{[13, 131]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^5 \quad [HC = 188]$$

$$1710 \quad {}_{FS}^{[2, 3, 3, 5, 19]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 \quad [HC = 189]$$

$$1725 \quad {}_{FS}^{[3, 5, 5, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 \quad [HC = 190]$$

$$1755 \quad {}_{FS}^{[3, 3, 3, 5, 13]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 \quad [HC = 191]$$

$$1768 \quad {}_{FS}^{[2, 2, 2, 13, 17]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 \quad [HC = 192]$$

$$1775 \quad {}_{FS}^{[5, 5, 71]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 \quad [HC = 193]$$

$$1775 \quad {}_{FS}^{[5, 5, 71]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 \quad [HC = 194]$$

$$1782 \quad {}_{FS}^{[2, 3, 3, 3, 3, 11]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 \quad [HC = 195]$$

$$1785 \quad {}_{FS}^{[3, 5, 7, 17]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 \quad [HC = 196]$$

$$1808 \quad {}_{FS}^{[2, 2, 2, 2, 113]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 \quad [HC = 197]$$

$$1824_{FS} [2, 2, 2, 2, 2, 3, 19] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 198]$$

$$1840_{FS} [2, 2, 2, 2, 5, 23] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 199]$$

$$1848_{FS} [2, 2, 2, 3, 7, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 200]$$

$$1850_{FS} [2, 5, 5, 37] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 201]$$

$$1872_{FS} [2, 2, 2, 2, 3, 3, 13] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 202]$$

$$1881_{FS} [3, 3, 11, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^5 [HC = 203]$$

$$1904_{FS} [2, 2, 2, 2, 7, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 204]$$

$$1922_{FS} [2, 31, 31] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 205]$$

$$1922_{FS} [2, 31, 31] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 206]$$

$$1922_{FS} [2, 31, 31] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 207]$$

$$1960_{FS} [2, 2, 2, 5, 7, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 208]$$

$$1989_{FS} [3, 3, 13, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 209]$$

$$2015_{FS} [5, 13, 31] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 210]$$

$$2019_{FS} [3, 673] = Fsum_{676} = [26]^2$$

$$FACTORSUM = X^2 [HC = 211]$$

$$2034_{FS} [2, 3, 3, 113] = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 212]$$

$$2052_{FS} [2, 2, 3, 3, 3, 19] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 213]$$

$$2059_{FS} [29, 71] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 214]$$

$$2070_{FS} [2, 3, 3, 5, 23] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^7 [HC = 215]$$

$$2071_{FS} [19, 109] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^3 [HC = 216]$$

$$2079_{FS} [3, 3, 3, 7, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 217]$$

$$2106_{FS} [2, 3, 3, 3, 3, 13] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 218]$$

$$2120_{FS} [2, 2, 2, 5, 53] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 219]$$

$$2120_{FS} [2, 2, 2, 5, 53] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 220]$$

$$2120_{FS} [2, 2, 2, 5, 53] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^5 [HC = 221]$$

$$2125_{FS} [5, 5, 5, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 222]$$

$$2130_{FS} [2, 3, 5, 71] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 223]$$

$$2130_{FS} [2, 3, 5, 71] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^5 [HC = 224]$$

$$2142_{FS} [2, 3, 3, 7, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 225]$$

$$2145_{FS} [3, 5, 11, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 226]$$

$$2159_{FS} [17, 127] = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 227]$$

$$2174_{FS}^{[2, 1087]} = Fsum_{1089} = [33]^2$$

$$FACTORSUM = X^3 [HC = 228]$$

$$2200_{FS}^{[2, 2, 2, 5, 5, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 229]$$

$$2205_{FS}^{[3, 3, 5, 7, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 230]$$

$$2208_{FS}^{[2, 2, 2, 2, 3, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 231]$$

$$2211_{FS}^{[3, 11, 67]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 232]$$

$$2211_{FS}^{[3, 11, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 233]$$

$$2219_{FS}^{[7, 317]} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 234]$$

$$2220_{FS}^{[2, 2, 3, 5, 37]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 235]$$

$$2264_{FS}^{[2, 2, 2, 283]} = Fsum_{289} = [17]^2$$

$$FACTORSUM = X^2 [HC = 236]$$

$$2272_{FS}^{[2, 2, 2, 2, 71]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 237]$$

$$2272_{FS}^{[2, 2, 2, 2, 2, 71]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^5 [HC = 238]$$

$$2288_{FS}^{[2, 2, 2, 2, 11, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 239]$$

$$2352_{FS}^{[2, 2, 2, 2, 3, 7, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 240]$$

$$2368_{FS}^{[2, 2, 2, 2, 2, 37]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 241]$$

$$2385_{FS}^{[3, 3, 5, 53]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 242]$$

$$2385_{FS}^{[3, 3, 5, 53]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 243]$$

$$2385_{FS}^{[3, 3, 5, 53]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 244]$$

$$2387_{FS}^{[7, 11, 31]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 245]$$

$$2395_{FS}^{[5, 479]} = Fsum_{484} = [22]^2$$

$$FACTORSUM = X^2 [HC = 246]$$

$$2418_{FS}^{[2, 3, 13, 31]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 247]$$

$$2419_{FS}^{[41, 59]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 248]$$

$$2444_{FS}^{[2, 2, 13, 47]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 249]$$

$$2444_{FS}^{[2, 2, 13, 47]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 250]$$

$$2444_{FS}^{[2, 2, 13, 47]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 251]$$

$$2446_{FS}^{[2, 1223]} = Fsum_{1225} = [35]^2$$

$$FACTORSUM = X^3 [HC = 252]$$

$$2475_{FS}^{[3, 3, 5, 5, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 253]$$

$$2484_{FS}^{[2, 2, 3, 3, 3, 23]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 254]$$

$$2491_{FS}^{[47, 53]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 255]$$

$$2492_{FS}^{[2, 2, 7, 89]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^5 [HC = 256]$$

$$2541_{FS}^{[3, 7, 11, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 257]$$

$$2544_{FS} [2, 2, 2, 2, 3, 53] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 258]$$

$$2544_{FS} [2, 2, 2, 2, 3, 53] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 259]$$

$$2544_{FS} [2, 2, 2, 2, 3, 53] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 260]$$

$$2547_{FS} [3, 3, 283] = Fsum_{289} = [17]^2$$

$$FACTORSUM = X^5 [HC = 261]$$

$$2550_{FS} [2, 3, 5, 5, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 262]$$

$$2556_{FS} [2, 2, 3, 3, 71] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 263]$$

$$2556_{FS} [2, 2, 3, 3, 71] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^5 [HC = 264]$$

$$2574_{FS} [2, 3, 3, 11, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 265]$$

$$2625_{FS} [3, 5, 5, 5, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 266]$$

$$2639_{FS} [7, 13, 29] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 267]$$

$$2640 \quad {}_{FS} [2, 2, 2, 2, 3, 5, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 \quad [HC = 268]$$

$$2646 \quad {}_{FS} [2, 3, 3, 3, 7, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 \quad [HC = 269]$$

$$2664 \quad {}_{FS} [2, 2, 2, 3, 3, 37] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 \quad [HC = 270]$$

$$2696 \quad {}_{FS} [2, 2, 2, 337] = Fsum_{343} = [7]^3$$

$$FACTORSUM = X^5 \quad [HC = 271]$$

$$2720 \quad {}_{FS} [2, 2, 2, 2, 2, 5, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 \quad [HC = 272]$$

$$2734 \quad {}_{FS} [2, 1367] = Fsum_{1369} = [37]^2$$

$$FACTORSUM = X^3 \quad [HC = 273]$$

$$2744 \quad {}_{FS} [2, 2, 2, 7, 7, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 \quad [HC = 274]$$

$$2793 \quad {}_{FS} [3, 7, 7, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 \quad [HC = 275]$$

$$2800 \quad {}_{FS} [2, 2, 2, 2, 5, 5, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 \quad [HC = 276]$$

$$2805 \quad {}_{FS} [3, 5, 11, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 \quad [HC = 277]$$

$$2816_{FS}^{[2, 2, 2, 2, 2, 2, 2, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 278]$$

$$2855_{FS}^{[5, 571]} = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 279]$$

$$2862_{FS}^{[2, 3, 3, 3, 53]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 280]$$

$$2862_{FS}^{[2, 3, 3, 3, 53]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 281]$$

$$2862_{FS}^{[2, 3, 3, 3, 53]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 282]$$

$$2874_{FS}^{[2, 3, 479]} = Fsum_{484} = [22]^2$$

$$FACTORSUM = X^2 [HC = 283]$$

$$2882_{FS}^{[2, 11, 131]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 284]$$

$$2924_{FS}^{[2, 2, 17, 43]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 285]$$

$$2924_{FS}^{[2, 2, 17, 43]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 286]$$

$$2924_{FS}^{[2, 2, 17, 43]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^7 [HC = 287]$$

$$2938 \quad {}_{FS} [2, 13, 113] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^3 \quad [HC = 288]$$

$$2970 \quad {}_{FS} [2, 3, 3, 3, 5, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 \quad [HC = 289]$$

$$2991 \quad {}_{FS} [3, 997] = Fsum_{1000} = [10]^3$$

$$FACTORSUM = X^2 \quad [HC = 290]$$

$$2992 \quad {}_{FS} [2, 2, 2, 2, 11, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 \quad [HC = 291]$$

$$2997 \quad {}_{FS} [3, 3, 3, 3, 37] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 \quad [HC = 292]$$

$$3002 \quad {}_{FS} [2, 19, 79] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^7 \quad [HC = 293]$$

$$3007 \quad {}_{FS} [31, 97] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^5 \quad [HC = 294]$$

$$3025 \quad {}_{FS} [5, 5, 11, 11] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 \quad [HC = 295]$$

$$3033 \quad {}_{FS} [3, 3, 337] = Fsum_{343} = [7]^3$$

$$FACTORSUM = X^2 \quad [HC = 296]$$

$$3043 \quad {}_{FS} [17, 179] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 \quad [HC = 297]$$

$$3059_{FS} [7, 19, 23] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 298]$$

$$3060_{FS} [2, 2, 3, 3, 5, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 299]$$

$$3063_{FS} [3, 1021] = Fsum_{1024} = [32]^2$$

$$FACTORSUM = X^5 [HC = 300]$$

$$3063_{FS} [3, 1021] = Fsum_{1024} = [4]^5$$

$$FACTORSUM = X^{10} [HC = 301]$$

$$3063_{FS} [3, 1021] = Fsum_{1024} = [2]^{10}$$

$$FACTORSUM = X^3 [HC = 302]$$

$$3087_{FS} [3, 3, 7, 7, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 303]$$

$$3111_{FS} [3, 17, 61] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 304]$$

$$3111_{FS} [3, 17, 61] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 305]$$

$$3116_{FS} [2, 2, 19, 41] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 306]$$

$$3116_{FS} [2, 2, 19, 41] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 307]$$

$$3116_{FS} [2, 2, 19, 41] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 308]$$

$$3125_{FS} [5, 5, 5, 5, 5] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 309]$$

$$3150_{FS} [2, 3, 3, 5, 5, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 310]$$

$$3168_{FS} [2, 2, 2, 2, 2, 3, 3, 11] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 311]$$

$$3170_{FS} [2, 5, 317] = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^5 [HC = 312]$$

$$3185_{FS} [5, 7, 7, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 313]$$

$$3264_{FS} [2, 2, 2, 2, 2, 2, 3, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 314]$$

$$3283_{FS} [7, 7, 67] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 315]$$

$$3283_{FS} [7, 7, 67] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 316]$$

$$3325_{FS} [5, 5, 7, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 317]$$

$$3360_{FS} [2, 2, 2, 2, 2, 3, 5, 7] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 318]$$

$$3363_{FS} [3, 19, 59] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 319]$$

$$3363_{FS} [3, 19, 59] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 320]$$

$$3366_{FS} [2, 3, 3, 11, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 321]$$

$$3383_{FS} [17, 199] = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 322]$$

$$3404_{FS} [2, 2, 23, 37] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 323]$$

$$3404_{FS} [2, 2, 23, 37] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 324]$$

$$3404_{FS} [2, 2, 23, 37] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 325]$$

$$3410_{FS} [2, 5, 11, 31] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 326]$$

$$3426_{FS} [2, 3, 571] = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 327]$$

$$3443_{FS}^{[11, 313]} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 328]$$

$$3459_{FS}^{[3, 1153]} = Fsum_{1156} = [34]^2$$

$$FACTORSUM = X^2 [HC = 329]$$

$$3503_{FS}^{[31, 113]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 330]$$

$$3531_{FS}^{[3, 11, 107]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 331]$$

$$3549_{FS}^{[3, 7, 13, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 332]$$

$$3560_{FS}^{[2, 2, 2, 5, 89]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^3 [HC = 333]$$

$$3564_{FS}^{[2, 2, 3, 3, 3, 3, 11]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 334]$$

$$3584_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 335]$$

$$3596_{FS}^{[2, 2, 29, 31]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 336]$$

$$3596_{FS}^{[2, 2, 29, 31]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 337]$$

$$3596_{FS}^{[2, 2, 29, 31]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^5 [HC = 338]$$

$$3630_{FS}^{[2, 3, 5, 11, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 339]$$

$$3672_{FS}^{[2, 2, 2, 3, 3, 3, 17]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 340]$$

$$3675_{FS}^{[3, 5, 5, 7, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 341]$$

$$3694_{FS}^{[2, 1847]} = Fsum_{1849} = [43]^2$$

$$FACTORSUM = X^7 [HC = 342]$$

$$3706_{FS}^{[2, 17, 109]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^3 [HC = 343]$$

$$3743_{FS}^{[19, 197]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 344]$$

$$3750_{FS}^{[2, 3, 5, 5, 5, 5]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 345]$$

$$3770_{FS}^{[2, 5, 13, 29]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 346]$$

$$3773_{FS}^{[7, 7, 7, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 347]$$

$$3780_{FS}^{[2, 2, 3, 3, 3, 5, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 348]$$

$$3804_{FS}^{[2, 2, 3, 317]} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 349]$$

$$3815_{FS}^{[5, 7, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 350]$$

$$3822_{FS}^{[2, 3, 7, 7, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 351]$$

$$3872_{FS}^{[2, 2, 2, 2, 11, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 352]$$

$$3887_{FS}^{[13, 13, 23]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 353]$$

$$3920_{FS}^{[2, 2, 2, 2, 5, 7, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 354]$$

$$3955_{FS}^{[5, 7, 113]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 355]$$

$$3959_{FS}^{[37, 107]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 356]$$

$$3971_{FS}^{[11, 19, 19]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 357]$$

$$3979 \text{ }_{[23, 173]}^{FS} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 358]$$

$$3983 \text{ }_{[7, 569]}^{FS} = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 359]$$

$$3990 \text{ }_{[2, 3, 5, 7, 19]}^{FS} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 360]$$

$$3993 \text{ }_{[3, 11, 11, 11]}^{FS} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 361]$$

$$4000 \text{ }_{[2, 2, 2, 2, 5, 5, 5]}^{FS} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 362]$$

$$4005 \text{ }_{[3, 3, 5, 89]}^{FS} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 363]$$

$$4032 \text{ }_{[2, 2, 2, 2, 2, 2, 3, 3, 7]}^{FS} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 364]$$

$$4043 \text{ }_{[13, 311]}^{FS} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 365]$$

$$4063 \text{ }_{[17, 239]}^{FS} = Fsum_{256} = [16]^2$$

$$FACTORSUM = X^4 [HC = 366]$$

$$4063 \text{ }_{[17, 239]}^{FS} = Fsum_{256} = [4]^4$$

$$FACTORSUM = X^8 [HC = 367]$$

$$4063_{FS} [17, 239] = Fsum_{256} = [2]^8$$

$$FACTORSUM = X^7 [HC = 368]$$

$$4066_{FS} [2, 19, 107] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^7 [HC = 369]$$

$$4087_{FS} [61, 67] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 370]$$

$$4092_{FS} [2, 2, 3, 11, 31] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 371]$$

$$4131_{FS} [3, 3, 3, 3, 3, 17] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 372]$$

$$4136_{FS} [2, 2, 2, 11, 47] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 373]$$

$$4136_{FS} [2, 2, 2, 11, 47] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 374]$$

$$4136_{FS} [2, 2, 2, 11, 47] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 375]$$

$$4154_{FS} [2, 31, 67] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 376]$$

$$4165_{FS} [5, 7, 7, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 377]$$

$$4184 \begin{matrix} FS \\ [2, 2, 2, 523] = Fsum \\ 529 \end{matrix} = [23]^2$$

$$FACTORSUM = X^2 [HC = 378]$$

$$4199 \begin{matrix} FS \\ [13, 17, 19] = Fsum \\ 49 \end{matrix} = [7]^2$$

$$FACTORSUM = X^2 [HC = 379]$$

$$4215 \begin{matrix} FS \\ [3, 5, 281] = Fsum \\ 289 \end{matrix} = [17]^2$$

$$FACTORSUM = X^2 [HC = 380]$$

$$4223 \begin{matrix} FS \\ [41, 103] = Fsum \\ 144 \end{matrix} = [12]^2$$

$$FACTORSUM = X^2 [HC = 381]$$

$$4225 \begin{matrix} FS \\ [5, 5, 13, 13] = Fsum \\ 36 \end{matrix} = [6]^2$$

$$FACTORSUM = X^3 [HC = 382]$$

$$4251 \begin{matrix} FS \\ [3, 13, 109] = Fsum \\ 125 \end{matrix} = [5]^3$$

$$FACTORSUM = X^2 [HC = 383]$$

$$4256 \begin{matrix} FS \\ [2, 2, 2, 2, 7, 19] = Fsum \\ 36 \end{matrix} = [6]^2$$

$$FACTORSUM = X^2 [HC = 384]$$

$$4272 \begin{matrix} FS \\ [2, 2, 2, 2, 3, 89] = Fsum \\ 100 \end{matrix} = [10]^2$$

$$FACTORSUM = X^2 [HC = 385]$$

$$4279 \begin{matrix} FS \\ [11, 389] = Fsum \\ 400 \end{matrix} = [20]^2$$

$$FACTORSUM = X^2 [HC = 386]$$

$$4316 \begin{matrix} FS \\ [2, 2, 13, 83] = Fsum \\ 100 \end{matrix} = [10]^2$$

$$FACTORSUM = X^2 [HC = 387]$$

$$4343 \quad {}_{FS} [43, 101] = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^5 [HC = 388]$$

$$4356 \quad {}_{FS} [2, 2, 3, 3, 11, 11] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 389]$$

$$4370 \quad {}_{FS} [2, 5, 19, 23] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 390]$$

$$4371 \quad {}_{FS} [3, 31, 47] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 391]$$

$$4371 \quad {}_{FS} [3, 31, 47] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^3 [HC = 392]$$

$$4375 \quad {}_{FS} [5, 5, 5, 5, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 393]$$

$$4410 \quad {}_{FS} [2, 3, 3, 5, 7, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 394]$$

$$4414 \quad {}_{FS} [2, 2207] = Fsum_{2209} = [47]^2$$

$$FACTORSUM = X^3 [HC = 395]$$

$$4439 \quad {}_{FS} [23, 193] = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 396]$$

$$4466 \quad {}_{FS} [2, 7, 11, 29] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 397]$$

$$4496_{FS}^{[2, 2, 2, 2, 281]} = Fsum_{289} = [17]^2$$

$$FACTORSUM = X^2 [HC = 398]$$

$$4500_{FS}^{[2, 2, 3, 3, 5, 5, 5]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 399]$$

$$4514_{FS}^{[2, 37, 61]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 400]$$

$$4524_{FS}^{[2, 2, 3, 13, 29]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 401]$$

$$4536_{FS}^{[2, 2, 2, 3, 3, 3, 3, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^5 [HC = 402]$$

$$4550_{FS}^{[2, 5, 5, 7, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 403]$$

$$4551_{FS}^{[3, 37, 41]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 404]$$

$$4551_{FS}^{[3, 37, 41]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 405]$$

$$4559_{FS}^{[47, 97]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 406]$$

$$4578_{FS}^{[2, 3, 7, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 407]$$

$$4653_{FS}^{[3, 3, 11, 47]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 408]$$

$$4653_{FS}^{[3, 3, 11, 47]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 409]$$

$$4653_{FS}^{[3, 3, 11, 47]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 410]$$

$$4690_{FS}^{[2, 5, 7, 67]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 411]$$

$$4690_{FS}^{[2, 5, 7, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^3 [HC = 412]$$

$$4704_{FS}^{[2, 2, 2, 2, 3, 7, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 413]$$

$$4706_{FS}^{[2, 13, 181]} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 414]$$

$$4707_{FS}^{[3, 3, 523]} = Fsum_{529} = [23]^2$$

$$FACTORSUM = X^7 [HC = 415]$$

$$4738_{FS}^{[2, 23, 103]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^3 [HC = 416]$$

$$4746_{FS}^{[2, 3, 7, 113]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 417]$$

$$4750_{FS} [2, 5, 5, 5, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 418]$$
$$4788_{FS} [2, 2, 3, 3, 7, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 419]$$
$$4791_{FS} [3, 1597] = Fsum_{1600} = [40]^2$$

$$FACTORSUM = X^2 [HC = 420]$$
$$4798_{FS} [2, 2399] = Fsum_{2401} = [49]^2$$

$$FACTORSUM = X^4 [HC = 421]$$
$$4798_{FS} [2, 2399] = Fsum_{2401} = [7]^4$$

$$FACTORSUM = X^2 [HC = 422]$$
$$4800_{FS} [2, 2, 2, 2, 2, 2, 3, 5, 5] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 423]$$
$$4806_{FS} [2, 3, 3, 3, 89] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 424]$$
$$4843_{FS} [29, 167] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^5 [HC = 425]$$
$$4893_{FS} [3, 7, 233] = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 426]$$
$$4952_{FS} [2, 2, 2, 619] = Fsum_{625} = [25]^2$$

$$FACTORSUM = X^4 [HC = 427]$$

$$4952_{FS}^{[2, 2, 2, 619]} = Fsum_{625} = [5]^4$$

$$FACTORSUM = X^7 [HC = 428]$$

$$4972_{FS}^{[2, 2, 11, 113]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 429]$$

$$4998_{FS}^{[2, 3, 7, 7, 17]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 430]$$

$$5005_{FS}^{[5, 7, 11, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 431]$$

$$5015_{FS}^{[5, 17, 59]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 432]$$

$$5015_{FS}^{[5, 17, 59]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 433]$$

$$5058_{FS}^{[2, 3, 3, 281]} = Fsum_{289} = [17]^2$$

$$FACTORSUM = X^2 [HC = 434]$$

$$5063_{FS}^{[61, 83]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 435]$$

$$5070_{FS}^{[2, 3, 5, 13, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 436]$$

$$5095_{FS}^{[5, 1019]} = Fsum_{1024} = [32]^2$$

$$FACTORSUM = X^5 [HC = 437]$$

$$5095_{FS}^{[5, 1019]} = Fsum_{1024} = [4]^5$$

$$FACTORSUM = X^{10} [HC = 438]$$

$$5095_{FS}^{[5, 1019]} = Fsum_{1024} = [2]^{10}$$

$$FACTORSUM = X^2 [HC = 439]$$

$$5103_{FS}^{[3, 3, 3, 3, 3, 3, 7]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 440]$$

$$5120_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2, 2, 5]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 441]$$

$$5151_{FS}^{[3, 17, 101]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 442]$$

$$5183_{FS}^{[71, 73]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 443]$$

$$5219_{FS}^{[17, 307]} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 444]$$

$$5243_{FS}^{[7, 7, 107]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 445]$$

$$5244_{FS}^{[2, 2, 3, 19, 23]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 446]$$

$$5250_{FS}^{[2, 3, 5, 5, 5, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 447]$$

$$5292_{FS}^{[2, 2, 3, 3, 3, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 448]$$

$$5295_{FS}^{[3, 5, 353]} = Fsum_{361} = [19]^2$$

$$FACTORSUM = X^3 [HC = 449]$$

$$5308_{FS}^{[2, 2, 1327]} = Fsum_{1331} = [11]^3$$

$$FACTORSUM = X^2 [HC = 450]$$

$$5359_{FS}^{[23, 233]} = Fsum_{256} = [16]^2$$

$$FACTORSUM = X^4 [HC = 451]$$

$$5359_{FS}^{[23, 233]} = Fsum_{256} = [4]^4$$

$$FACTORSUM = X^8 [HC = 452]$$

$$5359_{FS}^{[23, 233]} = Fsum_{256} = [2]^8$$

$$FACTORSUM = X^2 [HC = 453]$$

$$5372_{FS}^{[2, 2, 17, 79]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^5 [HC = 454]$$

$$5390_{FS}^{[2, 5, 7, 7, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 455]$$

$$5400_{FS}^{[2, 2, 2, 3, 3, 3, 5, 5]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 456]$$

$$5408_{FS}^{[2, 2, 2, 2, 2, 13, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 457]$$

$$5450_{FS} [2, 5, 5, 109] = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 458]$$

$$5460_{FS} [2, 2, 3, 5, 7, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 459]$$

$$5474_{FS} [2, 7, 17, 23] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 460]$$

$$5495_{FS} [5, 7, 157] = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 461]$$

$$5551_{FS} [7, 13, 61] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 462]$$

$$5551_{FS} [7, 13, 61] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 463]$$

$$5571_{FS} [3, 3, 619] = Fsum_{625} = [25]^2$$

$$FACTORSUM = X^4 [HC = 464]$$

$$5571_{FS} [3, 3, 619] = Fsum_{625} = [5]^4$$

$$FACTORSUM = X^2 [HC = 465]$$

$$5576_{FS} [2, 2, 2, 17, 41] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 466]$$

$$5576_{FS} [2, 2, 2, 17, 41] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 467]$$

$$5576_{FS}^{[2, 2, 2, 17, 41]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 468]$$

$$5600_{FS}^{[2, 2, 2, 2, 2, 5, 5, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^7 [HC = 469]$$

$$5626_{FS}^{[2, 29, 97]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 470]$$

$$5628_{FS}^{[2, 2, 3, 7, 67]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 471]$$

$$5628_{FS}^{[2, 2, 3, 7, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 472]$$

$$5648_{FS}^{[2, 2, 2, 2, 353]} = Fsum_{361} = [19]^2$$

$$FACTORSUM = X^3 [HC = 473]$$

$$5650_{FS}^{[2, 5, 5, 113]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 474]$$

$$5690_{FS}^{[2, 5, 569]} = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 475]$$

$$5700_{FS}^{[2, 2, 3, 5, 5, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 476]$$

$$5755_{FS}^{[5, 1151]} = Fsum_{1156} = [34]^2$$

$$FACTORSUM = X^2 [HC = 477]$$

$$5760_{FS} [2, 2, 2, 2, 2, 2, 2, 3, 3, 5] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 478]$$

$$5799_{FS} [3, 1933] = Fsum_{1936} = [44]^2$$

$$FACTORSUM = X^5 [HC = 479]$$

$$5824_{FS} [2, 2, 2, 2, 2, 7, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^5 [HC = 480]$$

$$5825_{FS} [5, 5, 233] = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^3 [HC = 481]$$

$$5871_{FS} [3, 19, 103] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 482]$$

$$5929_{FS} [7, 7, 11, 11] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 483]$$

$$5950_{FS} [2, 5, 5, 7, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 484]$$

$$5995_{FS} [5, 11, 109] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 485]$$

$$6006_{FS} [2, 3, 7, 11, 13] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 486]$$

$$6018_{FS} [2, 3, 17, 59] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 487]$$

$$6018_{FS} [2, 3, 17, 59] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 488]$$

$$6046_{FS} [2, 3023] = Fsum_{3025} = [55]^2$$

$$FACTORSUM = X^2 [HC = 489]$$

$$6075_{FS} [3, 3, 3, 3, 3, 5, 5] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 490]$$

$$6076_{FS} [2, 2, 7, 7, 31] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 491]$$

$$6080_{FS} [2, 2, 2, 2, 2, 2, 5, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 492]$$

$$6084_{FS} [2, 2, 3, 3, 13, 13] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 493]$$

$$6095_{FS} [5, 23, 53] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 494]$$

$$6095_{FS} [5, 23, 53] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 495]$$

$$6114_{FS} [2, 3, 1019] = Fsum_{1024} = [32]^2$$

$$FACTORSUM = X^5 [HC = 496]$$

$$6114_{FS} [2, 3, 1019] = Fsum_{1024} = [4]^5$$

$$FACTORSUM = X^{10} [HC = 497]$$



$$6339_{FS} [3, 2113] = Fsum_{2116} = [46]^2$$

$$FACTORSUM = X^2 [HC = 508]$$

$$6354_{FS} [2, 3, 3, 353] = Fsum_{361} = [19]^2$$

$$FACTORSUM = X^2 [HC = 509]$$

$$6380_{FS} [2, 2, 5, 11, 29] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 510]$$

$$6455_{FS} [5, 1291] = Fsum_{1296} = [36]^2$$

$$FACTORSUM = X^4 [HC = 511]$$

$$6455_{FS} [5, 1291] = Fsum_{1296} = [6]^4$$

$$FACTORSUM = X^5 [HC = 512]$$

$$6468_{FS} [2, 2, 3, 7, 7, 11] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 513]$$

$$6480_{FS} [2, 2, 2, 2, 3, 3, 3, 3, 5] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 514]$$

$$6487_{FS} [13, 499] = Fsum_{512} = [8]^3$$

$$FACTORSUM = X^9 [HC = 515]$$

$$6487_{FS} [13, 499] = Fsum_{512} = [2]^9$$

$$FACTORSUM = X^2 [HC = 516]$$

$$6495_{FS} [3, 5, 433] = Fsum_{441} = [21]^2$$

$$FACTORSUM = X^5 [HC = 517]$$

$$6500_{FS}^{[2, 2, 5, 5, 5, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 518]$$

$$6511_{FS}^{[17, 383]} = Fsum_{400} = [20]^2$$

$$FACTORSUM = X^2 [HC = 519]$$

$$6540_{FS}^{[2, 2, 3, 5, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 520]$$

$$6552_{FS}^{[2, 2, 2, 3, 3, 7, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 521]$$

$$6554_{FS}^{[2, 29, 113]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 522]$$

$$6578_{FS}^{[2, 11, 13, 23]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 523]$$

$$6583_{FS}^{[29, 227]} = Fsum_{256} = [16]^2$$

$$FACTORSUM = X^4 [HC = 524]$$

$$6583_{FS}^{[29, 227]} = Fsum_{256} = [4]^4$$

$$FACTORSUM = X^8 [HC = 525]$$

$$6583_{FS}^{[29, 227]} = Fsum_{256} = [2]^8$$

$$FACTORSUM = X^7 [HC = 526]$$

$$6586_{FS}^{[2, 37, 89]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 527]$$

$$6594_{FS}^{[2, 3, 7, 157]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 528]$$

$$6604_{FS}^{[2, 2, 13, 127]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^3 [HC = 529]$$

$$6623_{FS}^{[37, 179]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 530]$$

$$6695_{FS}^{[5, 13, 103]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^3 [HC = 531]$$

$$6698_{FS}^{[2, 17, 197]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 532]$$

$$6700_{FS}^{[2, 2, 5, 5, 67]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 533]$$

$$6700_{FS}^{[2, 2, 5, 5, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 534]$$

$$6716_{FS}^{[2, 2, 23, 73]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^3 [HC = 535]$$

$$6720_{FS}^{[2, 2, 2, 2, 2, 2, 3, 5, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 536]$$

$$6728_{FS}^{[2, 2, 2, 29, 29]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 537]$$

$$6728_{FS} [2, 2, 2, 29, 29] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 538]$$

$$6728_{FS} [2, 2, 2, 29, 29] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 539]$$

$$6746_{FS} [2, 3373] = Fsum_{3375} = [15]^3$$

$$FACTORSUM = X^3 [HC = 540]$$

$$6780_{FS} [2, 2, 3, 5, 113] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 541]$$

$$6815_{FS} [5, 29, 47] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 542]$$

$$6815_{FS} [5, 29, 47] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 543]$$

$$6828_{FS} [2, 2, 3, 569] = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 544]$$

$$6840_{FS} [2, 2, 2, 3, 3, 5, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 545]$$

$$6842_{FS} [2, 11, 311] = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 546]$$

$$6906_{FS} [2, 3, 1151] = Fsum_{1156} = [34]^2$$

$$FACTORSUM = X^2 [HC = 547]$$

$$6909 \text{ }_{FS}^{[3, 7, 7, 47]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 548]$$

$$6909 \text{ }_{FS}^{[3, 7, 7, 47]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 549]$$

$$6909 \text{ }_{FS}^{[3, 7, 7, 47]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 550]$$

$$6912 \text{ }_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2, 3, 3, 3]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 551]$$

$$6928 \text{ }_{FS}^{[2, 2, 2, 2, 433]} = Fsum_{441} = [21]^2$$

$$FACTORSUM = X^3 [HC = 552]$$

$$6955 \text{ }_{FS}^{[5, 13, 107]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 553]$$

$$6963 \text{ }_{FS}^{[3, 11, 211]} = Fsum_{225} = [15]^2$$

$$FACTORSUM = X^2 [HC = 554]$$

$$6976 \text{ }_{FS}^{[2, 2, 2, 2, 2, 2, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 555]$$

$$6990 \text{ }_{FS}^{[2, 3, 5, 233]} = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 556]$$

$$7003 \text{ }_{FS}^{[47, 149]} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^3 [HC = 557]$$

$$7042_{FS}^{[2, 7, 503]} = Fsum_{512} = [8]^3$$

$$FACTORSUM = X^9 [HC = 558]$$

$$7042_{FS}^{[2, 7, 503]} = Fsum_{512} = [2]^9$$

$$FACTORSUM = X^2 [HC = 559]$$

$$7106_{FS}^{[2, 11, 17, 19]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^7 [HC = 560]$$

$$7138_{FS}^{[2, 43, 83]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 561]$$

$$7139_{FS}^{[11, 11, 59]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 562]$$

$$7139_{FS}^{[11, 11, 59]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 563]$$

$$7140_{FS}^{[2, 2, 3, 5, 7, 17]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 564]$$

$$7150_{FS}^{[2, 5, 5, 11, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 565]$$

$$7168_{FS}^{[2, 2, 2, 2, 2, 2, 2, 2, 2, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^3 [HC = 566]$$

$$7194_{FS}^{[2, 3, 11, 109]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 567]$$

$$7195_{FS}^{[5, 1439]} = Fsum_{1444} = [38]^2$$

$$FACTORSUM = X^3 [HC = 568]$$

$$7232_{FS}^{[2, 2, 2, 2, 2, 2, 113]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^7 [HC = 569]$$

$$7276_{FS}^{[2, 2, 17, 107]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 570]$$

$$7290_{FS}^{[2, 3, 3, 3, 3, 3, 5]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 571]$$

$$7296_{FS}^{[2, 2, 2, 2, 2, 2, 3, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 572]$$

$$7304_{FS}^{[2, 2, 2, 11, 83]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 573]$$

$$7314_{FS}^{[2, 3, 23, 53]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 574]$$

$$7314_{FS}^{[2, 3, 23, 53]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 575]$$

$$7319_{FS}^{[13, 563]} = Fsum_{576} = [24]^2$$

$$FACTORSUM = X^2 [HC = 576]$$

$$7336_{FS}^{[2, 2, 2, 7, 131]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^5 [HC = 577]$$

$$7371_{FS}^{[3, 3, 3, 3, 7, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^7 [HC = 578]$$

$$7426_{FS}^{[2, 47, 79]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 579]$$

$$7438_{FS}^{[2, 3719]} = Fsum_{3721} = [61]^2$$

$$FACTORSUM = X^3 [HC = 580]$$

$$7439_{FS}^{[43, 173]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^5 [HC = 581]$$

$$7456_{FS}^{[2, 2, 2, 2, 2, 233]} = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 582]$$

$$7490_{FS}^{[2, 5, 7, 107]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^3 [HC = 583]$$

$$7500_{FS}^{[2, 2, 3, 5, 5, 5, 5]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 584]$$

$$7514_{FS}^{[2, 13, 17, 17]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^5 [HC = 585]$$

$$7557_{FS}^{[3, 11, 229]} = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^3 [HC = 586]$$

$$7560_{FS}^{[2, 2, 2, 3, 3, 3, 5, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 587]$$

$$7569 \text{ }_{FS}^{[3, 3, 29, 29]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 588]$$

$$7569 \text{ }_{FS}^{[3, 3, 29, 29]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 589]$$

$$7569 \text{ }_{FS}^{[3, 3, 29, 29]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 590]$$

$$7599 \text{ }_{FS}^{[3, 17, 149]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 591]$$

$$7616 \text{ }_{FS}^{[2, 2, 2, 2, 2, 2, 7, 17]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 592]$$

$$7656 \text{ }_{FS}^{[2, 2, 2, 3, 11, 29]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 593]$$

$$7695 \text{ }_{FS}^{[3, 3, 3, 3, 5, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^5 [HC = 594]$$

$$7700 \text{ }_{FS}^{[2, 2, 5, 5, 7, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^7 [HC = 595]$$

$$7738 \text{ }_{FS}^{[2, 53, 73]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 596]$$

$$7743 \text{ }_{FS}^{[3, 29, 89]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 597]$$

$$7746_{FS}^{[2, 3, 1291]} = Fsum_{1296} = [36]^2$$

$$FACTORSUM = X^4 [HC = 598]$$

$$7746_{FS}^{[2, 3, 1291]} = Fsum_{1296} = [6]^4$$

$$FACTORSUM = X^2 [HC = 599]$$

$$7772_{FS}^{[2, 2, 29, 67]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 600]$$

$$7776_{FS}^{[2, 2, 2, 2, 2, 3, 3, 3, 3]} = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^2 [HC = 601]$$

$$7794_{FS}^{[2, 3, 3, 433]} = Fsum_{441} = [21]^2$$

$$FACTORSUM = X^5 [HC = 602]$$

$$7800_{FS}^{[2, 2, 2, 3, 5, 5, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 603]$$

$$7815_{FS}^{[3, 5, 521]} = Fsum_{529} = [23]^2$$

$$FACTORSUM = X^2 [HC = 604]$$

$$7820_{FS}^{[2, 2, 5, 17, 23]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 605]$$

$$7848_{FS}^{[2, 2, 2, 3, 3, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 606]$$

$$7850_{FS}^{[2, 5, 5, 157]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^7 [HC = 607]$$

$$7906_{FS} [2, 59, 67] = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 608]$$

$$7930_{FS} [2, 5, 13, 61] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 609]$$

$$7930_{FS} [2, 5, 13, 61] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 610]$$

$$7931_{FS} [7, 11, 103] = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 611]$$

$$7934_{FS} [2, 3967] = Fsum_{3969} = [63]^2$$

$$FACTORSUM = X^2 [HC = 612]$$

$$7939_{FS} [17, 467] = Fsum_{484} = [22]^2$$

$$FACTORSUM = X^2 [HC = 613]$$

$$7964_{FS} [2, 2, 11, 181] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^3 [HC = 614]$$

$$8000_{FS} [2, 2, 2, 2, 2, 2, 5, 5, 5] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 615]$$

$$8034_{FS} [2, 3, 13, 103] = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 616]$$

$$8040_{FS} [2, 2, 2, 3, 5, 67] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 617]$$

$$8040_{FS} [2, 2, 2, 3, 5, 67] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^3 [HC = 618]$$

$$8064_{FS} [2, 2, 2, 2, 2, 2, 3, 3, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 619]$$

$$8083_{FS} [59, 137] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^3 [HC = 620]$$

$$8136_{FS} [2, 2, 2, 3, 3, 113] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 621]$$

$$8178_{FS} [2, 3, 29, 47] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 622]$$

$$8178_{FS} [2, 3, 29, 47] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 623]$$

$$8208_{FS} [2, 2, 2, 2, 3, 3, 3, 19] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 624]$$

$$8217_{FS} [3, 3, 11, 83] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^3 [HC = 625]$$

$$8223_{FS} [3, 2741] = Fsum_{2744} = [14]^3$$

$$FACTORSUM = X^2 [HC = 626]$$

$$8225_{FS} [5, 5, 7, 47] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 627]$$

$$8225_{FS}^{[5, 5, 7, 47]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 628]$$

$$8225_{FS}^{[5, 5, 7, 47]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 629]$$

$$8239_{FS}^{[7, 11, 107]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 630]$$

$$8253_{FS}^{[3, 3, 7, 131]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 631]$$

$$8282_{FS}^{[2, 41, 101]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^5 [HC = 632]$$

$$8320_{FS}^{[2, 2, 2, 2, 2, 2, 5, 13]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 633]$$

$$8336_{FS}^{[2, 2, 2, 2, 521]} = Fsum_{529} = [23]^2$$

$$FACTORSUM = X^3 [HC = 634]$$

$$8346_{FS}^{[2, 3, 13, 107]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 635]$$

$$8385_{FS}^{[3, 5, 13, 43]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 636]$$

$$8385_{FS}^{[3, 5, 13, 43]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 637]$$

$$8385_{FS} [3, 5, 13, 43] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^5 [HC = 638]$$

$$8388_{FS} [2, 2, 3, 3, 233] = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 639]$$

$$8470_{FS} [2, 5, 7, 11, 11] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 640]$$

$$8500_{FS} [2, 2, 5, 5, 5, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 641]$$

$$8503_{FS} [11, 773] = Fsum_{784} = [28]^2$$

$$FACTORSUM = X^3 [HC = 642]$$

$$8505_{FS} [3, 3, 3, 3, 3, 5, 7] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 643]$$

$$8568_{FS} [2, 2, 2, 3, 3, 7, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 644]$$

$$8576_{FS} [2, 2, 2, 2, 2, 2, 67] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 645]$$

$$8576_{FS} [2, 2, 2, 2, 2, 2, 67] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 646]$$

$$8580_{FS} [2, 2, 3, 5, 11, 13] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 647]$$

$$8613_{FS} [3, 3, 3, 11, 29] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^3 [HC = 648]$$

$$8615_{FS} [5, 1723] = Fsum_{1728} = [12]^3$$

$$FACTORSUM = X^2 [HC = 649]$$

$$8634_{FS} [2, 3, 1439] = Fsum_{1444} = [38]^2$$

$$FACTORSUM = X^3 [HC = 650]$$

$$8639_{FS} [53, 163] = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 651]$$

$$8680_{FS} [2, 2, 2, 5, 7, 31] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 652]$$

$$8732_{FS} [2, 2, 37, 59] = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 653]$$

$$8748_{FS} [2, 2, 3, 3, 3, 3, 3, 3, 3] = Fsum_{25} = [5]^2$$

$$FACTORSUM = X^3 [HC = 654]$$

$$8755_{FS} [5, 17, 103] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 655]$$

$$8764_{FS} [2, 2, 7, 313] = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^5 [HC = 656]$$

$$8775_{FS} [3, 3, 3, 5, 5, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^3 [HC = 657]$$

$$8786_{FS}^{[2, 23, 191]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^2 [HC = 658]$$

$$8795_{FS}^{[5, 1759]} = Fsum_{1764} = [42]^2$$

$$FACTORSUM = X^2 [HC = 659]$$

$$8829_{FS}^{[3, 3, 3, 3, 109]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^5 [HC = 660]$$

$$8853_{FS}^{[3, 13, 227]} = Fsum_{243} = [3]^5$$

$$FACTORSUM = X^2 [HC = 661]$$

$$8918_{FS}^{[2, 7, 7, 7, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 662]$$

$$8944_{FS}^{[2, 2, 2, 2, 13, 43]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 663]$$

$$8944_{FS}^{[2, 2, 2, 2, 13, 43]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 664]$$

$$8944_{FS}^{[2, 2, 2, 2, 13, 43]} = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 665]$$

$$8988_{FS}^{[2, 2, 3, 7, 107]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^3 [HC = 666]$$

$$9000_{FS}^{[2, 2, 2, 3, 3, 5, 5, 5]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 667]$$

$$9023_{FS}^{[7, 1289]} = Fsum_{1296} = [36]^2$$

$$FACTORSUM = X^4 [HC = 668]$$

$$9023_{FS}^{[7, 1289]} = Fsum_{1296} = [6]^4$$

$$FACTORSUM = X^2 [HC = 669]$$

$$9045_{FS}^{[3, 3, 3, 5, 67]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 670]$$

$$9045_{FS}^{[3, 3, 3, 5, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 671]$$

$$9051_{FS}^{[3, 7, 431]} = Fsum_{441} = [21]^2$$

$$FACTORSUM = X^3 [HC = 672]$$

$$9072_{FS}^{[2, 2, 2, 2, 3, 3, 3, 3, 7]} = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^2 [HC = 673]$$

$$9083_{FS}^{[31, 293]} = Fsum_{324} = [18]^2$$

$$FACTORSUM = X^2 [HC = 674]$$

$$9116_{FS}^{[2, 2, 43, 53]} = Fsum_{100} = [10]^2$$

$$FACTORSUM = X^2 [HC = 675]$$

$$9152_{FS}^{[2, 2, 2, 2, 2, 2, 11, 13]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^3 [HC = 676]$$

$$9153_{FS}^{[3, 3, 3, 3, 113]} = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^2 [HC = 677]$$

$$9191_{FS}^{[7, 13, 101]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 678]$$

$$9215_{FS}^{[5, 19, 97]} = Fsum_{121} = [11]^2$$

$$FACTORSUM = X^2 [HC = 679]$$

$$9234_{FS}^{[2, 3, 3, 3, 3, 3, 19]} = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^5 [HC = 680]$$

$$9240_{FS}^{[2, 2, 2, 3, 5, 7, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 681]$$

$$9255_{FS}^{[3, 5, 617]} = Fsum_{625} = [25]^2$$

$$FACTORSUM = X^4 [HC = 682]$$

$$9255_{FS}^{[3, 5, 617]} = Fsum_{625} = [5]^4$$

$$FACTORSUM = X^3 [HC = 683]$$

$$9263_{FS}^{[59, 157]} = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^7 [HC = 684]$$

$$9292_{FS}^{[2, 2, 23, 101]} = Fsum_{128} = [2]^7$$

$$FACTORSUM = X^2 [HC = 685]$$

$$9308_{FS}^{[2, 2, 13, 179]} = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 686]$$

$$9331_{FS}^{[7, 31, 43]} = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 687]$$

$$9331 \quad {}_{FS} [7, 31, 43] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^5 [HC = 688]$$

$$9360 \quad {}_{FS} [2, 2, 2, 2, 3, 3, 5, 13] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 689]$$

$$9378 \quad {}_{FS} [2, 3, 3, 521] = Fsum_{529} = [23]^2$$

$$FACTORSUM = X^2 [HC = 690]$$

$$9379 \quad {}_{FS} [83, 113] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 691]$$

$$9384 \quad {}_{FS} [2, 2, 2, 3, 17, 23] = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 692]$$

$$9394 \quad {}_{FS} [2, 7, 11, 61] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 693]$$

$$9394 \quad {}_{FS} [2, 7, 11, 61] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 694]$$

$$9420 \quad {}_{FS} [2, 2, 3, 5, 157] = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 695]$$

$$9434 \quad {}_{FS} [2, 53, 89] = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 696]$$

$$9516 \quad {}_{FS} [2, 2, 3, 13, 61] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 697]$$

$$9516_{FS} [2, 2, 3, 13, 61] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 698]$$

$$9518_{FS} [2, 4759] = Fsum_{4761} = [69]^2$$

$$FACTORSUM = X^2 [HC = 699]$$

$$9523_{FS} [89, 107] = Fsum_{196} = [14]^2$$

$$FACTORSUM = X^2 [HC = 700]$$

$$9583_{FS} [7, 37, 37] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 701]$$

$$9583_{FS} [7, 37, 37] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^3 [HC = 702]$$

$$9595_{FS} [5, 19, 101] = Fsum_{125} = [5]^3$$

$$FACTORSUM = X^3 [HC = 703]$$

$$9600_{FS} [2, 2, 2, 2, 2, 2, 2, 3, 5, 5] = Fsum_{27} = [3]^3$$

$$FACTORSUM = X^5 [HC = 704]$$

$$9604_{FS} [2, 2, 7, 7, 7, 7] = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 705]$$

$$9639_{FS} [3, 3, 3, 3, 7, 17] = Fsum_{36} = [6]^2$$

$$FACTORSUM = X^2 [HC = 706]$$

$$9648_{FS} [2, 2, 2, 2, 3, 3, 67] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 707]$$

$$9648 \text{ }_{FS}^{[2, 2, 2, 2, 3, 3, 67]} = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 708]$$

$$9655 \text{ }_{FS}^{[5, 1931]} = Fsum_{1936} = [44]^2$$

$$FACTORSUM = X^2 [HC = 709]$$

$$9695 \text{ }_{FS}^{[5, 7, 277]} = Fsum_{289} = [17]^2$$

$$FACTORSUM = X^2 [HC = 710]$$

$$9765 \text{ }_{FS}^{[3, 3, 5, 7, 31]} = Fsum_{49} = [7]^2$$

$$FACTORSUM = X^2 [HC = 711]$$

$$9794 \text{ }_{FS}^{[2, 59, 83]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^2 [HC = 712]$$

$$9815 \text{ }_{FS}^{[5, 13, 151]} = Fsum_{169} = [13]^2$$

$$FACTORSUM = X^2 [HC = 713]$$

$$9825 \text{ }_{FS}^{[3, 5, 5, 131]} = Fsum_{144} = [12]^2$$

$$FACTORSUM = X^5 [HC = 714]$$

$$9856 \text{ }_{FS}^{[2, 2, 2, 2, 2, 2, 7, 11]} = Fsum_{32} = [2]^5$$

$$FACTORSUM = X^2 [HC = 715]$$

$$9870 \text{ }_{FS}^{[2, 3, 5, 7, 47]} = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 716]$$

$$9870 \text{ }_{FS}^{[2, 3, 5, 7, 47]} = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 717]$$

$$9870_{FS} [2, 3, 5, 7, 47] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^2 [HC = 718]$$

$$9872_{FS} [2, 2, 2, 2, 617] = Fsum_{625} = [25]^2$$

$$FACTORSUM = X^4 [HC = 719]$$

$$9872_{FS} [2, 2, 2, 2, 617] = Fsum_{625} = [5]^4$$

$$FACTORSUM = X^2 [HC = 720]$$

$$9911_{FS} [11, 17, 53] = Fsum_{81} = [9]^2$$

$$FACTORSUM = X^4 [HC = 721]$$

$$9911_{FS} [11, 17, 53] = Fsum_{81} = [3]^4$$

$$FACTORSUM = X^2 [HC = 722]$$

$$9933_{FS} [3, 7, 11, 43] = Fsum_{64} = [8]^2$$

$$FACTORSUM = X^3 [HC = 723]$$

$$9933_{FS} [3, 7, 11, 43] = Fsum_{64} = [4]^3$$

$$FACTORSUM = X^6 [HC = 724]$$

$$9933_{FS} [3, 7, 11, 43] = Fsum_{64} = [2]^6$$

$$FACTORSUM = X^3 [HC = 725]$$

$$9983_{FS} [67, 149] = Fsum_{216} = [6]^3$$

$$FACTORSUM = X^5 [HC = 726]$$

$$9984_{FS} [2, 2, 2, 2, 2, 2, 2, 2, 3, 13] = Fsum_{32} = [2]^5$$

(1)

