

MATH MINGLE: WEEK 4

Determine the value of

$$\sqrt{1 + F_2 \sqrt{1 + F_4 \sqrt{1 + F_6 \sqrt{\dots \sqrt{1 + F_{2n} \sqrt{\dots}}}}}}$$

where F_n is the n^{th} Fibonacci number: $F_0 = 0$, $F_1 = 1$, and $F_n = F_{n-1} + F_{n-2}$.

Twisting Passages All Alike

YASQUMWWLFCMOFNIRLLJKTPGFJVGED
 SCEMTZZQWLVBZYLFWMTWYGHJAWPFGMLL
 PFOTRITQAQCVPBHUNCMSIAVIYMNEZA
 AOFFIWOCNOTQKJSSFHUZTEAPMYCADB
 LTQGEADNDRDWIOHCHMJDMDHMTUKWUC
 WVIQCHQFVTTYZQGNIVLSAYWILRDWPH
 AOVTFZCWFZQDZHJKGSKRMKQJTDYAE
 YLGTGMSIJYIOBHILUPFGIRQAACLDJJC
 SHPBCVOUFZTOAVVJIRZNGHPIICLLK
 OHTFJVCYRIOLWWITGBMGELOKCWTEIG
 PYNKEWGGVZOTKMOTGZKSFOHTAHRTLB
 TCAONEMTLITBCENUYTTJNZYSTZBMTN
 UPUOJDSVYFFRGHWTDVOWFCVEVQEWDC
 RRSBGCFAZEFEWLMEXPQUMWYJCUBGSU
 NEWWFDALDZPJEMUQHTHZVUWUFZPGFL
 LKMIISMIEQIEAMHTEQYLPUGMPLLPFS
 OECBNKBTZSCTSPCPTSNGJINVYAIIEE
 RSYDUMNPNIQKJABMQUIECPMPMLPVS
 IWKHBFTOVHYLOSUPJLGFOKHAYWRKNA
 GWLLEMRYCNGAAEJULSERZNEHYCFPNC
 HOPPBUCTTEHAEIWLEJHICHBHOZJTPS
 TTMDJOZMISRQTWZQLDBTLDBNKPNKD
 SYWGCHUBUDUMUOJTGUYHPJLQYVHLRR
 OLQMRUNUPRQDMGNHMJFUZPGPNDWZU
 POHHBABWNWNGNQTTFBHOGCNVIDJLBJ

