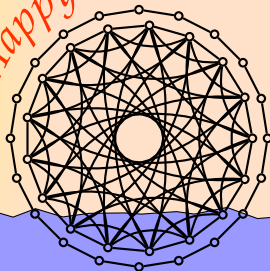


$$17 - \det \begin{bmatrix} 2 & 0 & 1 & 7 \\ 7 & 2 & 0 & 1 \\ 1 & 7 & 2 & 0 \\ 0 & 1 & 7 & 2 \end{bmatrix} = 2017$$

Happy New Math Year 2017

spectrum

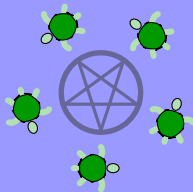


Cycle(20) \cup Paley(17)

$$\left\{ \begin{array}{l} 2\zeta^0 + 0\zeta^1 + 1\zeta^2 + 7\zeta^3 : \\ \zeta = 1, i, -1, -i \end{array} \right\}$$

Normalized Laplacian
spectrum not unique!

Inertia bound not tight!



Jephian