Speedup factor

$$n = 5$$
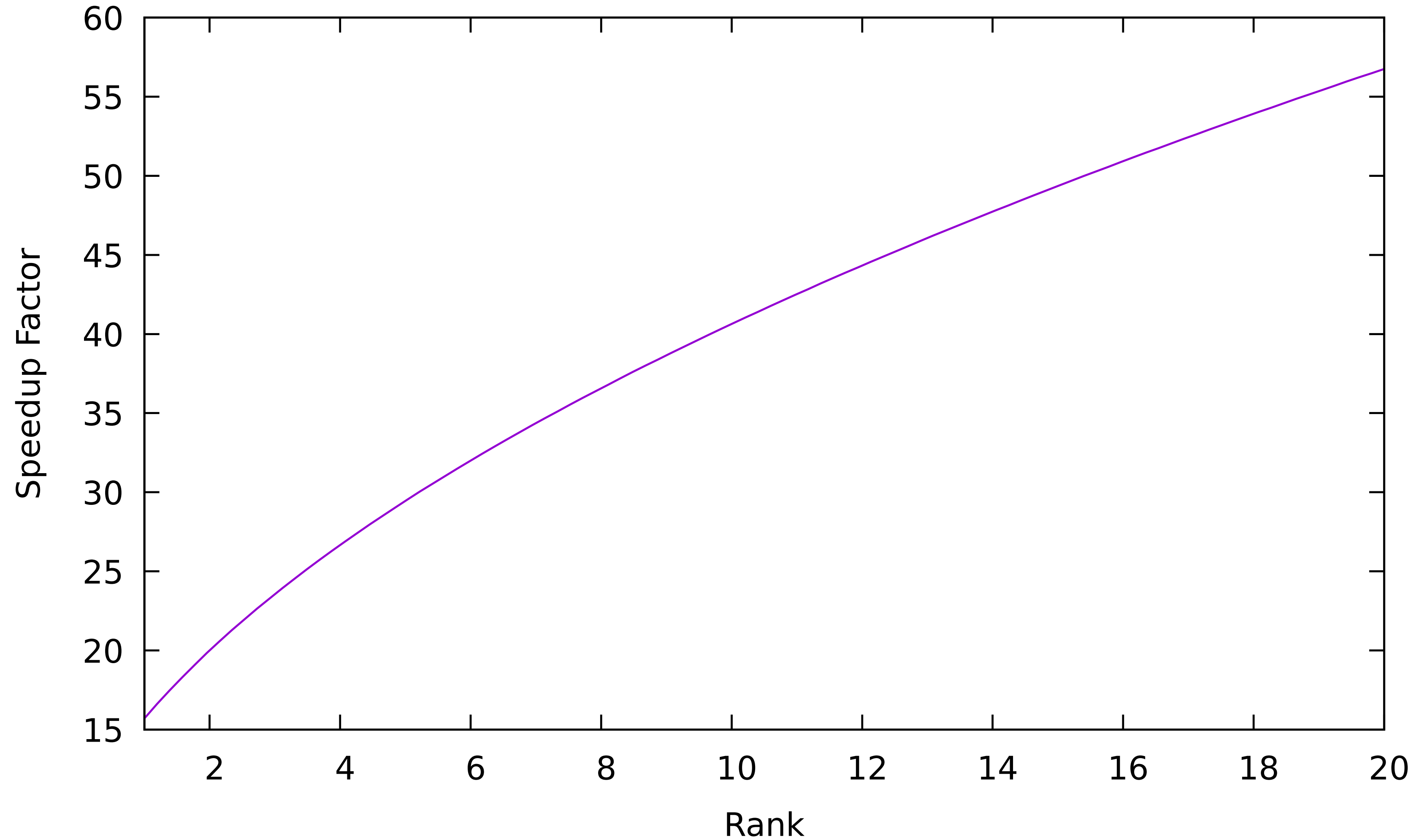
$$\frac{2^k \binom{n}{2}}{\binom{k}{\lfloor \frac{k+1}{2} \rfloor}}$$

Thank You!