

$$\mathbf{v}[\mathbf{k}] = V(k) + (2^{-d} \frac{4}{\pi} 2^{2k}), \quad \mathbf{w}[\mathbf{k}] = W(k) + \left(2^{-d} \frac{1}{k!} \left(\frac{\pi}{2}\right)^k\right),$$