Representations of affine and vertex operator algebras
Ten-minutes problem 1

Compute
$$\langle (a_{-3})^2(a_{-5})^4(a_{-7})^5 v,\ (a_{-3})^2(a_{-5})^4(a_{-7})^5 v\rangle,$$
where v is the highest weight vector of the Fock module $\pi_{\mu,k}$ and $\langle \cdot, \cdot \rangle$ is the invariant form normalized by $\langle v, v\rangle = 1$.