One end of a light elastic string is attached to a fixed point O. The other end of the string is attached to a particle P of mass $0.4\,\text{kg}$. The string has natural length $0.6\,\text{m}$ and modulus of elasticity $24\,\text{N}$. The particle is released from rest at O. Find the two possible values of the distance OP for which the particle has speed $1.5\,\text{m s}^{-1}$. [6]