2-26. A 2000-kg car travels up a $\theta = 8^{\circ}$ slope with a normally distributed constant velocity $v \sim (20, 2^2)$ m/s. If the car has an efficiency of $\varepsilon = 0.7$, determine the power developed by the engine.

Solution: $P_{engine} \sim N(78.02, 7.80^2) \text{ kW}$.

