1. Work is defined as the product of the force times the distance through which the force acts. In this case the force and the distance through which it acts are given directly.

$$
\begin{aligned}
& W=F d \\
& W=(70 \mathrm{~N})(6.0 \mathrm{~m})=420 \mathrm{~N} \mathrm{~m} \\
& \mathrm{~W}=420 \mathrm{~J}
\end{aligned}
$$

