Question	Answer	Marks	Guidance
(a)	$600g \times 15$ [= 90 000]	M1	Attempt potential energy.
	Total work done by crane = [90 000 + 10 000 =] 100 000 J	A1	
		2	
(b)	$100\,000 = 12\,500 \times t$	M1	Use of work done = power × time to set up an equation from which t can be found.
	Time = 8 s	A1 FT	FT on *their* work done = 100 000
	Alternative scheme for question (b)		
	Average force $F = \dfrac{\text{Total WD}}{15}$ Average velocity $v = \dfrac{s}{t} = \dfrac{15}{t}$ $P = Fv \rightarrow 12500 = \dfrac{\text{Total WD}}{15} \times \dfrac{15}{t}$	M1	A complete method, using $P = Fv$, for setting up an equation from which t can be found.
	Time = 8 s	A1 FT	
		2	