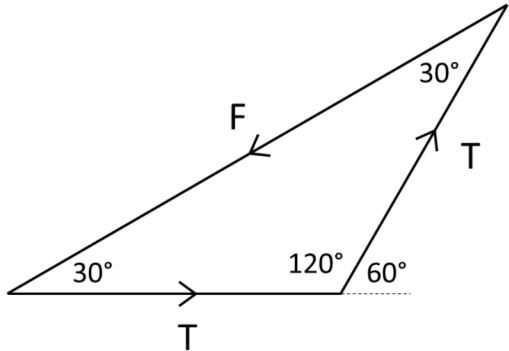


Question Number	Answer	Mark
14(a)	<p>Straight arrow at least 6cm long representing F, with label (1)</p> <p>Vector triangle drawn with at least two sides in the triangle labelled, and F on the longest side. (1)</p> <p>All three arrows in correct relative directions (dependent on MP2) (1)</p> <p>$T = 70 \text{ N}$ (allow range of 65 to 75 N) (1)</p> <p><u>Example vector diagram</u></p> 	4
14(b)	<p>Use of $\Delta W = F\Delta s$ (1)</p> <p>Use of $P = W / t$ (allow (1)</p> <p>$P = 28 \text{ (W)}$, which is not equal to 35 (W), so is not consistent (1)</p> <p>[Use of $v = \frac{s}{t}$ [1]</p> <p>Use of $P = Fv$ [1]</p> <p>$P = 28 \text{ W}$ which is not equal to 35 W, so is not consistent [1]]</p> <p>Allow approaches that work backwards from 35 W to determine time, number of repetitions, force applied or vertical distance moved.</p> <p><u>Example calculation</u></p> <p>$\Delta W = 150 \text{ N} \times 0.25 \text{ m} = 37.5 \text{ J}$</p> <p>$P = \frac{37.5 \text{ J} \times 90}{120 \text{ s}} = 28.1 \text{ W}$</p>	3
Total for question 14		7