

Question number			Answer	Notes	Marks
7	(a)	(i)	Weight = mass x g;	allow in accepted symbols ignore units, triangle eqns	1
		(ii)	700; N / newton(s);	ignore kg m/s <sup>2</sup>	1 1
	(b)		<p><i>EXPLANATIONS ( not descriptions)</i></p> <p>Any <b>four</b> from:</p> <p>MP1. Weight / resultant force downwards;</p> <p>MP2. so at first (skydiver) accelerates;</p> <p>MP3. but drag increases with speed;</p> <p>MP4. hence resultant force decreases;</p> <p>MP5. so acceleration then decreases;</p> <p>MP6. so forces eventually balanced;</p> <p>MP7. causing terminal velocity;</p>	<p>allow suitable labels on graph</p> <p>drag = weight</p> <p>allow constant speed for terminal velocity but not maximum speed</p>	4