

Question			Answer	Marks	AO	Guidance
8	(a)		<b>not</b> a simple random sample since <b>each possible sample</b> does <b>not</b> have an <b>equal probability</b> of being selected	<b>B1</b>	<b>2.4</b>	allow “ <b>not</b> a simple random sample since <b>each plant</b> does <b>not</b> have an <b>equal probability</b> of being selected” ignore further comments unless contradictory  the essential elements of the comment are in bold
				[1]		
8	(b)		18 (shorter than 40 cm) seen 110 (shorter than 80 cm) <b>or</b> 10 (taller than 80 cm) seen  $\frac{92}{120}$ <b>oe or</b> $\frac{28}{120}$ <b>oe</b>  <b>awrt</b> 77% > 75% <b>oe</b> so this supports the (owner’s) statement	<b>B1</b> <b>B1</b>  <b>M1</b>  <b>A1</b>	<b>2.1</b> <b>1.1</b>  <b>1.1</b>  <b>2.2a</b>	may be embedded in calculation may be embedded in calculation  <b>FT</b> their 18 and their 110; allow <b>M1</b> for $\frac{91}{120}$ <b>or</b> $\frac{29}{120}$ <b>oe</b>  <b>or</b> $\frac{75}{100} \times 120 = 90$ <b>oe</b>  <b>or</b> 92 > 90 so this supports the (owner’s) statement; need comparison <b>and</b> comment
				[4]		
8	(c)		must refer to sample in answer  eg since different <b>samples</b> give different results, not all samples would necessarily support owner’s statement  eg no since another <b>sample</b> may contain all the tallest plants (and/or shortest)  eg no since the heights in other <b>samples</b> may be different	<b>B1</b>	<b>2.4</b>	ignore superfluous comments referring to eg growing conditions, soil type etc  do not allow eg no, conditions different for other plants  eg no, different plants on different rows  eg no, might be biggest and smallest plants on other rows  eg the first sample is not representative
				[1]		