

Question	Answer	Mark	Mark scheme	Additional guidance
13 (a)	$\begin{array}{r} 105 \\ 160 \\ 55 \end{array}$	<p>46 59 18 <b>37</b></p>	<p>M1 for 2 or 3 values correctly placed <b>or</b> <math>160 - 105 (= 55)</math></p> <p>M1 for 4 or 5 values correctly placed</p> <p>M1 (indep) for <math>160 \div 100 \times 40 (= 64)</math> oe</p> <p>A1 fully correct frequency tree</p> <p>SCB3 for <b>105</b> and <b>37</b> correctly placed <b>and</b> 55, 18, 59 and 46 shown but incorrectly placed</p>	<p>ft arithmetic errors from methods shown previously, eg <math>160 - 105 = 50</math>, then 105, 50, 37 and <math>50 - 37</math> placed correctly 64 may be placed incorrectly May be implied by adult veg + child veg = 64</p> $\begin{array}{r} 105 \\ 160 \\ 55 \end{array}$ <p>46 59 18 <b>37</b></p>
(b)	$\frac{59}{96}$	<p>M1</p> <p>C1</p>	<p>eg <math>\frac{a}{96}</math> where <math>0 &lt; a &lt; 96</math> and <math>a</math> is an integer</p> <p><b>or</b> <math>\frac{59}{b}</math> where <math>59 &lt; b \leq 160</math> and <math>b</math> is an integer</p> <p><b>or</b> <math>\frac{a}{[37 + 59]}</math> where <math>0 &lt; a &lt; [37 + 59]</math> and <math>a</math> is an integer</p> <p><b>or</b> <math>\frac{[59]}{b}</math> where <math>[59] &lt; b \leq 160</math> and <math>b</math> is an integer</p> <p>for <math>\frac{59}{96}</math> oe</p> <p><b>or</b> <math>\frac{[59]}{[37 + 59]}</math> ft their frequency tree in part (a)</p>	<p>ft from their frequency tree where <math>[37 + 59]</math> is the total of adult not vegetarian and child not vegetarian and <math>[59]</math> is their figure for adult not vegetarian</p> <p>equivalent decimals or percentages must be given to at least 2 sf rounded or truncated, eg 0.61(458...) or 61(.458...)%</p> <p><math>[37 + 59]</math> must be evaluated for this mark</p>