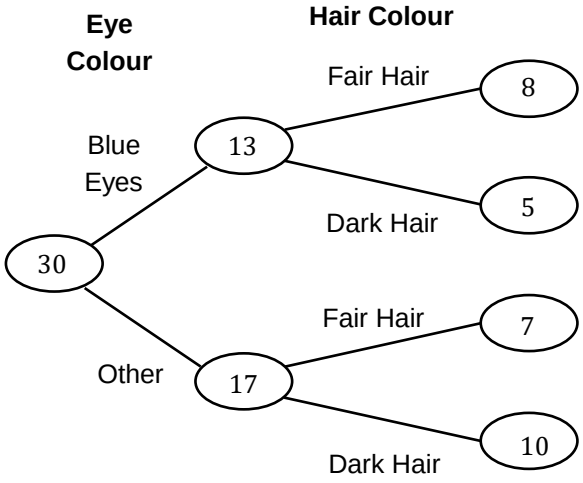
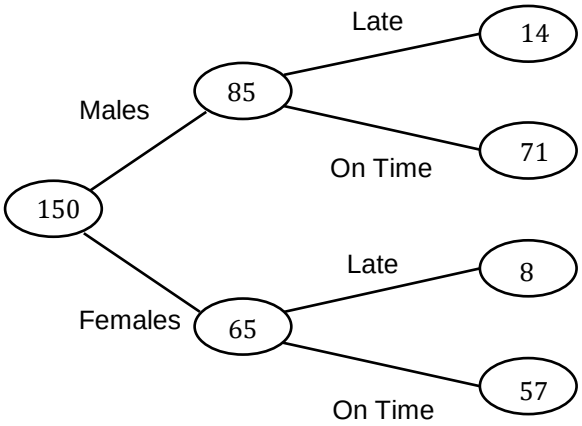
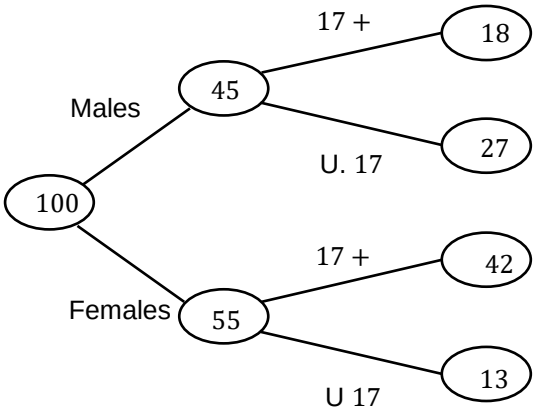
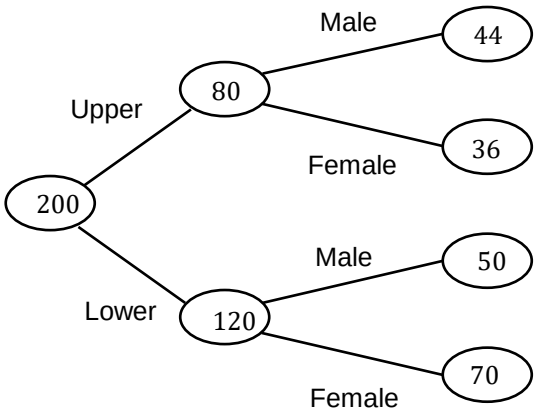
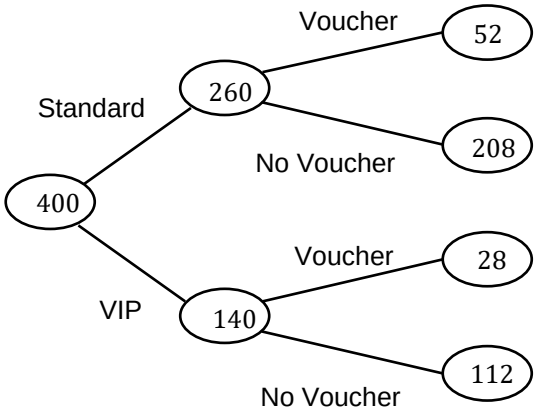
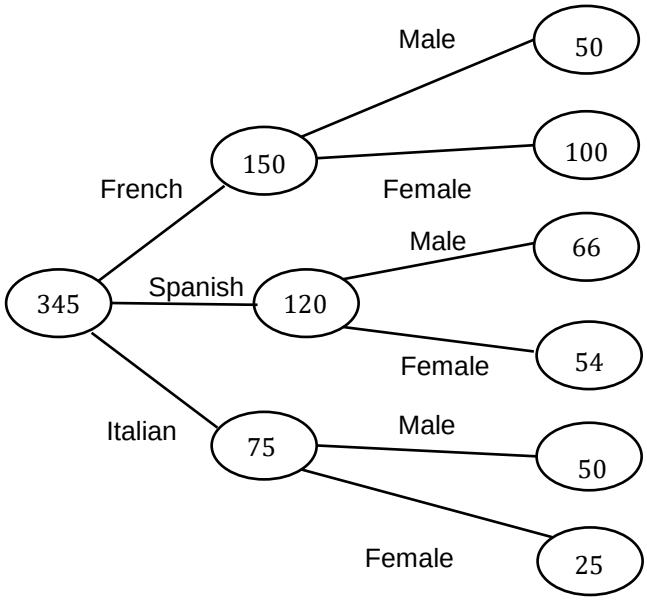
Frequency Trees Mark Scheme		
1(a)	<table><tr><th></th><th>Fair hair</th><th>Dark hair</th><th>TOTAL</th></tr><tr><td>**Blue eyes**</td><td>8</td><td>5</td><td>13</td></tr><tr><td>**Other**</td><td>7</td><td>10</td><td>17</td></tr><tr><td>**TOTAL**</td><td>15</td><td>15</td><td>30</td></tr></table>	[1] for two correct values [1] for three correct values [1] all correct
1(b)		[1] for two correct values [1] for four correct values [1] all correct
2(a)		[1] for 150, 85, 14 and 8 all being correct [1] [1] [1] Award one mark for each further correct answer
2(b)	$\frac{57}{150}$	[1] Or value given in part (a) for female-on time divided by 150 – error carried forward
3(a)		[1] for correct labels [1] for 100, 45 and 13 in correct places [1] for calculating 55 and 42 [1] for 27 [1] for 18

3(b)	$27 + 13 = 40$ members that are under 17	[1] for sum of value given on u17 branches in part (a)
	$\frac{40}{100} \times 100 = 40\%$	[1]
4		[1] for labelling frequency tree [1] mark for 200 and 120 [1] mark for 80 [1] mark for 36 [1] mark for 50 or 70 [1] Full marks if all cells correct with correct labels
5		[1] mark for 400 and 140 [1] mark for 260 [1] mark for 28 [1] mark for 52
5(b)	10% off is £4.50 or £6.30	[1] mark for £4.50 or £6.30
	Sales without vouchers $= 208 \times £5 + 112 \times £7 = £1824$	[1] Correct calculation
	Sales with vouchers $= 52 \times £4.50 + 28 \times £6.30 = £410.40$	[1] Correct calculation
	£2234.40	[1] All 4 marks for correct answer

6(a)		[1] 50 and 100 correct [1] 66 and 54 correct [1] 50 and 25 correct [1] All correct
6(b)	There is a total of 166 male students.	[1]

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