	Sets & Venn Diagrams Mark Scheme	
1(a)	<u>29</u> 50	[1] number of students that study maths divided by the total number of students
1(b)	$\frac{28}{50}$	[1] accept $\frac{14}{25}$
1(c)	$\frac{41}{50}$	[1]
2	$\begin{bmatrix} \xi & dog & cat \\ & 16 & 8 & 10 \\ & 2 & & & \end{bmatrix}$	[1] Dog and Cat correct [1] Intersection correct [1] All correct
3	ξ UK Abroad 20 100	[1] Correct labelling [1] 1 correct value [1] All correct
1	$\begin{bmatrix} \xi & uni & job \\ 16 & 24 & 58 \\ 4 & & & \end{bmatrix}$	[1] Number totals 92[1] Intersection is correct[1] Numbers correct for Uni and job
5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	[1] Numbers correct for intersection [1] Numbers correct for not P or not Q [1] Numbers correct for P and for Q

6(a)	2 F 17 14 6 T 23 18 H 4	[1] Correct diagram [1] Correct values within the Venn or for value out side indicating no preference [1] All correct
6(b)	$\frac{6}{100}$	[1]
6(c)	$\frac{55}{100}$	[1]
7	E A 140 B 140 35 70 7 20 10 1 4 14	[1] correct values inside diagram[1] correct values outside diagram[1] three correctly identified factors[1] all correct factors
8(a)	A = {1, 4, 9} B = {2, 3, 5, 7} C = {1, 2, 3, 5, 8}	[1] [1] [1]
	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
8(b)	$\frac{7}{10}$ or 0.7 or 70%	[1]