2014 EMIC Answers

Individual

1.	49	2.	7	3.	45	4.	6	5.	704
6.	5	7.	144	8.	15	9.	61	10.	43
11.	30	12.	2019	13.	30	14.	7.9	15.	75

Team

1.	3	2.	(18, 7), (17, 8), (16, 9), (2, 14), (11, 5), (4, 12), (13, 3), (6, 10), (15, 1)								
3.			8	81							
	The 8 possible adoption schemes are as follows										
	1-year-old	2-year-od	3-year-od		4-year-od	6-year-od					
	Apartment 4	Apartment 2	Apartı	ment 3	Apartment 12	Apartment 6					
	Apartment 2	Apartment 4	Apartment 3		Apartment 12	Apartment 6					
4	Apartment 12	Apartment 2	Apartment 3		Apartment 4	Apartment 6					
4.	Apartment 2	Apartment 12	Apartı	nent 3	Apartment 4	Apartment 6					
	Apartment 3	Apartment 2	Apartn	nent 12	Apartment 4	Apartment 6					
	Apartment 6	Apartment 2	Apartı	nent 3	Apartment 4	Apartment 12					
	Apartment 2	Apartment 6	Apartment 3		Apartment 4	Apartment 12					
	Apartment 3	Apartment 2	Apartment 6		Apartment 4	Apartment 12					
5.	1001011										
6. (a)	6,	6. (b)	2 triangles whose side length is the largest. For each triangle of the next size, 2 such kind of triangles. In a triangle of the next size, their number is 12. There are 12 triangles of the next size. For each triangle of the next size, their number is 14. Finally, there are 24 triangles of the smallest size.								
7.		8.	8								
9.	95			Divide the coins into four groups A, B, C and D							