



## Type U - Logic Problems

In these questions work out the answer using the information provided. Read all the information before attempting to work out the answer.

Example	
Question:	Five cyclists, Rob, Steve, Theo, Ursula and Veronica, all competed in a bike race. <b>Which rider finished in fourth place of the five?</b>
Information:	Steve finished before Ursula but behind Veronica.
	Theo got a puncture and finished last.
	Rob finished two places behind Veronica.
Explanation:	<i>Explanation: Theo was last; the highest placed rider was Veronica; Steve must have been second as he was behind Veronica, with either Ursula or Rob in third and fourth. The last clue tells us that Rob finished two places behind Veronica, i.e. in third place, so Ursula must have been fourth.</i>
Answer:	<b>Ursula</b>

Question 1	
Question:	Five ladies, Cathy, Rosie, Jean, Elaine and Nicky, meet in a café for refreshments. <b>Who was the only woman who did not have any food with her drink?</b>
Information:	Only Jean had a cold drink (orange juice) with her slice of carrot cake.
	Two ladies ate a piece of brownie with their hot drink; one of these two had tea and Nicky had coffee.
	Elaine and Rosie were the tea drinkers.
	The other coffee drinker prefers to drink it without food.
Use this space for working out:	
Answer:	



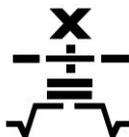
Question 2	
Question:	In an election, four parties (The Workers, The Toffs, The Freedom Party and The Democrats) got 98% of the vote between them; the remaining 2% went to 'Others'. <b>Who won the election?</b>
Information:	The Workers had a disappointing election, finishing with 20% of the vote, 15% behind the next party.
	The Freedom Party scored more than 6 times the vote of the Democrats.
	The Democrats only polled three times as many votes as the 'Others'
Use this space for working out:	
Answer:	

Question 3	
Question:	Which one of the following statements (A – E) must be true?
Information:	In a game of cards with four players (Gilly, Helen, Ian and Joe), the group is using the whole pack of 52 cards. Helen has three of the four aces, while Ian and Joe are both holding at least one Queen. Joe is trying to collect all the Kings, but only has two in his hand at the moment.
A	Ian has two Queens
B	Joe has the fourth ace
C	Gilly and Helen are holding a Queen each
D	At least one person in the group is holding no Kings
E	Helen has one Queen
Use this space for working out:	
Answer:	



Question 4	
Question:	A car buyer was deciding which model of car to buy; he was considering 5 brands: Audi; BMW; Infiniti; Mercedes and Volkswagen. All the cars were similar, though differed in the extras that came included in the price. <b>Which car had the most extras in its price?</b>
Information:	The only cars without rear seat DVD players were the BMW and the Infiniti.
	The BMW and Mercedes both came equipped with satnav, roof bars and Bluetooth.
	Bluetooth came as standard in the BMW, Mercedes and Volkswagen.
	Three cars (not the BMW or Mercedes) came with a rear parking camera fitted.
Use this space for working out:	
Answer:	

Question 5	
Information:	<p>There are five gears (cogs) connected in a row (like the 3 cogs in the diagram below). In this case, the first one is connected to the second one, the second one is connected to the third one, and so on.</p>  <p><b>How much faster would the last gear be</b> if the second gear was twice the size of the first gear, and all the other gears were the same size as the first gear?</p>
	A The last gear would be 3 times as fast as the first gear.
	B The last gear would be twice as fast as the first gear.
	C The last gear would be the same speed as the first gear.
	D The last gear would be half as fast as the first gear.
	E The last gear would be a third as fast as the first gear.
Answer:	



Question 6	
Question:	If all the below statements are true, which additional statement (only one of statements A-E) must also be true?
Information:	Elisa is five years younger than Marian. Elisa is three years older than Saman, who will be 12 next year.
A	Marian is 15 now
B	Elisa will be 10 next year.
C	This year, their ages add up to 32
D	Saman is three years older than Elisa
E	Next year, their ages will add up to 47
Use this space for working out:	
Answer:	

Question 7	
Question:	Five students, Joe, Karl, Louis, Martha and Niamh, all wear school uniform. <b>Which student wears the fewest items of uniform?</b>
Information:	Martha and Niamh have to wear skirts with their uniform. Louis prefers to wear a shirt; all the others choose to wear a polo shirt. Karl, Louis and Martha wear a sweatshirt. Joe, Karl, Louis and Niamh all have the school hoodie.
Use this space for working out:	
Answer:	



Question 8	
Question:	Five players in a cards club (Eric, Flora, Gareth, Helen and Isla) have preferred card games. <b>Which player is able to play the most games?</b>
Information:	Everyone except Flora likes poker.
	Gareth and Isla are not fond of pontoon, whereas the others love it.
	Helen and Flora are a strong bridge-playing pair; the rest do not play bridge.
	Eric and Flora play rummy but not whist; the only other rummy player, Isla, does not play whist with whist-lovers Gareth and Helen.
Use this space for working out:	
Answer:	

Question 9	
Question:	Alex was born in 2010 and his brother, Ewan, was born seven years earlier. <b>In which year will Ewan be twice his brother's age?</b>
Use this space for working out:	
Answer:	



Question 10	
Question:	Luke, Pete and James all compete in a 5km run. To qualify for the regional race, they have to complete the run in 24 minutes or less. Pete's time is 22 minutes and 40 seconds. Luke and James are both slower than Pete.
Information:	<b>Which of the following statements must be true?</b>
	A None of the runners qualify for the regional race.
	B James does not qualify for the regional race.
	C Luke and Pete both make it into the regional race.
	D All three runners qualify for the regional race.
	E Pete qualifies for the regional race.
Use this space for working out:	
Answer:	

END OF QUESTIONS – ANSWERS ON THE NEXT PAGE



Answers Type U – Logic Problems

Question Number	Answer
Example	Ursula
1	Cathy
2	The Freedom Party (Freedom 37%; Toffs 35%; Workers 20%; Democrats 6%, Others 2%.)
3	D - At least one person in the group is holding no Kings
4	Mercedes (4 extras)
5	C
6	E
7	Joe
8	Helen (4 games)
9	2017
10	E - Pete qualifies for the regional race.