Q1 What fraction of this square is shaded if the line inside divides the square into two equal parts?

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{3}{8}$
- D. $\frac{3}{5}$
- E. $\frac{3}{4}$

Q2 There are two plants in Mrs. Saumya's garden. One is 44 cm tall, and it grows 3 cm every 2 years. The other is 80 cm tall, and it grows 5 cm every 6 years. In how many years will the two plants have the same height?

- A. 36 years
- B. 40 years
- C. 48 years
- D. 52 years
- E. 54 years

Q3 A cheetah was running at 5 km per hour for ten seconds until it spotted an impala it wanted to catch. The cheetah then run faster and averaged to 60 km per hour for the next 40 seconds. The impala went away and the cheetah slowed down to an average of 5 km per hour for ten seconds. Rounded to the nearest km per hour, what was the cheetah's average speed for the entire minute?

- A. 54 km/h
- B. 50 km/h
- C. 46 km/h
- D. 42 km/h
- E. 35 km/h

Q4 I added the first ten whole numbers greater than 0. I forgot to include one whole number and I got 50 as the sum. Which one of these ten whole numbers I did not add?

    A. 1
    B. 3
    C. 5
    D. 7
    E. 6

Q5 To complete the grid below, each of the digits from 1 to 4 must occur exactly once in each row and in each column. What number should replace X?

1			2	
2	3			
			4	
			X	

Q6 There were 60 birds on three trees. Then 6 birds flew away from the first tree, 8 birds flew away from the second tree and 4 birds flew away from the third tree. Now there are the same number of birds on each tree. How many birds were there on the second tree in the beginning?

Q7 The brothers Tom and Jason gave truthful answers to the question about the number of members their chess club has. Tom said: "All the members of our club, except five girls, are boys." Jason said: "Every six members always includes at least four girls." What is the least number of members in their chess club?

Q8 A group of boys were picking apples. They each picked 3 apples. Then three other boys joined them. They wanted to share the picked apples equally among all the boys present, but found out that this was not possible. However, one of the boys picked one more apple. Now everyone could have exactly two apples. How many boys were there in the original group?

Q9 A game consists of black and white pieces. The number of black pieces is 5 more than 3 times the white pieces. 7 white and 15 black pieces are removed each round. After several rounds, there are 3 white and 56 black pieces left. How many pieces were there in the beginning?

Q10 A regiment has less than 1000 soldiers. The colonel planned in arranging the soldiers in the form of a rectangle. When he placed 17 soldiers in each row, one row was short of 1 soldier. When he placed 13 soldiers in each row, one soldier remains. If the regiment consists of three "battalions", each with the