



## Random thinking

Name:		
	Degree:	

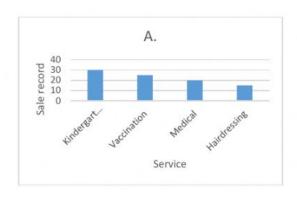
Read carefully each of the following problem situations and select the correct answer:

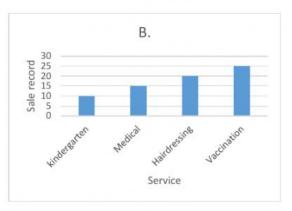
1. Laura has been a veterinarian for several years, she has recorded monthly the number of services she offers to her clients:

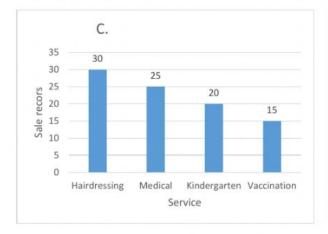
Services	Number of services
Hairdressing	30
Kindergarten	20
Medical	25
Vaccination	15

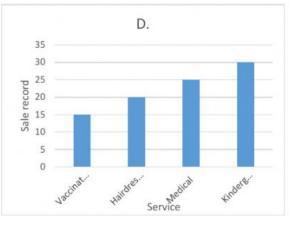


Which of the following bar charts represents the information recorded in the table above?









1





2. A game consists of throwing marbles towards a Wall trying to get the marble as close as possible to the wall. Manuel threw the marbles on a sand floor and Duvan on a tile floor. The table shows the number of marbles that each one threw and of them how many were close and how many were far from the wall:

Manuel

Sand floor					
Distance to the	Numbers of				
wall	marbles				
Near	15				
Far	5				
Total marbles thrown	20				

Duvan

Tile floor						
Distance to the wall	Numbers of marbles					
Near	3					
Far	7					
Total marbles thrown	10					

According to the information in the table, what was the most likely event?

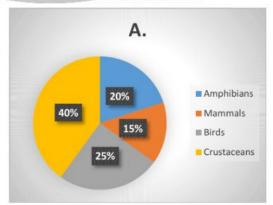
- a.) That the marble will be close to the wall when the floor is tiled.
- b.) That the marble was far from the wall when the floor is tiled.
- c.) That the marble will be close to the Wall when the floor is sand.
- d.) That the marble was far from the Wall when the floor is made of sand.
- 3. Francisca packed 50 oranges in a bag, of which 10 are Green. Without looking, she took out an orange from the bag. What is the probability that the orange you took out is Green?
  - a.)  $\frac{1}{10}$
  - b.)  $\frac{1}{50}$
  - c.)  $\frac{1}{15}$
  - d.)  $\frac{1}{5}$
- Many animal species are currently in danger of extinction. It is estimated that about 40% of amphibians, 25% of mammals, 15% of birds and 20% of crustaceans are threatened whit extinction.

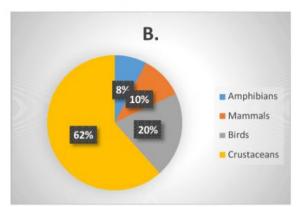


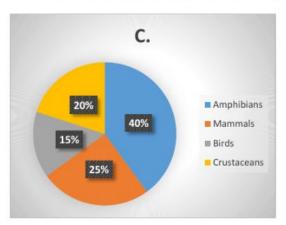
## Escuela de Ciencias de la Educación

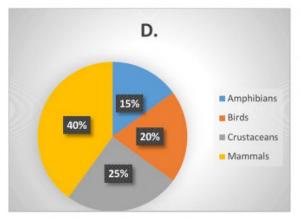


Which of the following graphs correctly shows the percentage of each species that is threatened with extinction?









5. The rector of the Guane Educational Institution asked for 160 desserts to distribute to his students on the day of achievements. Each dessert is packaged in an unmarked sealed box that cannot be seen inside and the boxes are mixed. The number of desserts for each taste is shown in the table:

Taste	Quantity		
Passion fruit	55		
Blackberry	45		
Chocolate	35		
Strawberry	25		

If Valeria is the first student to receive dessert, which taste of dessert is Valeria most likely to receive?



## Escuela de Ciencias de la Educación



- a.) Strwberry
- b.) Blackberry
- c.) Chocolate
- d.) Passion fruit
- 6. The fifth grade students will elect a representative for the math contest. The probability that it is represented by a girl is  $\frac{4}{10}$ , and the probability that it is a boy is  $\frac{6}{10}$ .

What are the candidates?

- a.) 5 girls y 5 kids
- b.) 3 girls y 7 kids
- c.) 4 girls y 6 kids
- d.) 6 girls y 4 kids
- 7. The sports teacher weighs a group of players to obtain the average weight and mode of the group. The weights obtained are the following:

41   48   37   55   40   41   50   30   43   45   41											
71   70   31   33   70   71   30   37   73   73   71	41	48	37	55	40	41	50	39	43	45	41

Sum of the weights:		Kg		
Number of heavy stude	ents:			
Average weight:	Kg	Custom:	Kg	