

- Las formas negativa e interrogativa se construyen de igual manera que para COULD. examples:

1. It may not rain this evening. - Puede no llover esta tarde.
2. Helen may not eat some apples. - Elena no puede comer manzanas.
3. May it rain this evening? - ¿Puede llover esta tarde?
4. May Helen eat some apples? - ¿Puede Elena comer manzanas?

- MIGHT es el pasado y condicional de MAY y se usa en la misma forma y con idéntico sentido. Establece probabilidad o conjectura y podemos también traducirlo por TAL VEZ. La construcción de la negación e interrogación sigue las mismas reglas que los anteriores auxiliares.

examples:

1. The farmers might plant corn if the weather is favorable.
Los agricultores tal vez planten maíz si el tiempo es favorable.
2. Cynthia might come to the party early.
Cynthia tal vez venga a la fiesta temprano.
3. The farmers might not plant corn if the weather isn't favorable.
Los agricultores tal vez no planten maíz si el tiempo no es favorable.
4. Cynthia might not come to party early.
Cynthia tal vez no venga a la fiesta temprano.
5. Might the farmers plant corn if the weather is favorable?
¿Podrían los agricultores plantar maíz si el tiempo es favorable?
6. Might Cynthia come to the party early?
¿Podría Cynthia venir a la fiesta temprano?

- MUST = DEBER. Usamos este auxiliar en tiempo presente cuando expresamos un deber por obligación; algo que tenemos que hacer. Lo acompaña siempre un verbo en infinitivo simple y la construcción de la negación e interrogación sigue las mismas reglas que para los auxiliares anteriores.

examples:

1. Katie must study to pass the exam. Katie debe estudiar para pasar el examen.
2. We must finish our dresses for the party. Debemos terminar nuestros vestidos para la fiesta.
3. You must not arrive late to class. No debes llegar tarde a clases.
4. The students must not run through the hallway. Los alumnos no deben correr por los pasillos.
5. Must Katie study to pass the exam? ¿Debe Katie estudiar para pasar el examen?
6. Must we finish our dresses for the party? ¿Debemos terminar nuestros vestidos para la fiesta?

- SHOULD = DEBER. Podemos traducirlo en condicional y en pasado de subjuntivo. Implica un deber moral, sin imposición ni obligación.

examples:

1. I should help my mother have the house clean. Yo debería ayudar a mi madre a tener la casa limpia.
2. We should fix the tire so it can be ready for use. Deberíamos arreglar la llanta para que pueda estar lista para usarse.
3. You should study harder to get better grades. Deberías estudiar más duro para obtener mejores calificaciones.
4. The players should practice more often to obtain better team results. Los jugadores deberían practicar con más frecuencia para obtener mejores resultados.

- La construcción de la negación e interrogación sigue las mismas reglas que para los demás auxiliares modales.

examples:

1. You should not lie. - No deberías mentir.
2. They shouldn't punish their younger brothers. - Ellos no deberían castigar a sus hermanos más pequeños.
3. Should you study more to get better grades? ¿Deberías estudiar más para obtener mejores calificaciones?
4. Should the players practice more often to obtain better team results? ¿Deberían los jugadores practicar con mas frecuencia para obtener mejores resultados?

- OUGHT TO.- es sinónimo de SHOULD en sentido de deber sin otra obligación que la moral. El verbo en infinitivo que sigue a este auxiliar lleva siempre la partícula TO. Lo traducimos en presente, condicional y pretérito de subjuntivo. Generalmente lo usamos para otorgar o pedir consejos.

examples:

1. Children ought to be obedient. Los niños deben ser obedientes.
2. The child ought to eat more to grow healthy. El niño debe comer más carne para crecer saludable.
3. You ought to drive carefully to have less accidents. Deberías manejar con cuidado para tener menos accidentes.

4. Mary ought to vaccinate her children.
Mary debería vacunar a sus niños.

- La construcción de la negación es la siguiente:

examples:

- Christopher ought not to drive so rapidly.
Cristóbal no debería manejar tan rápido.
- Helen ought not to get angry with her friends.
Elena no debe enojarse con sus amigas.

* OBSERVACION.- Generalmente no usamos esta forma (ought to) para formular preguntas en Inglés,

OBJETIVO: El alumno por escrito responderá a las prácticas gramaticales y aplicará el uso de los auxiliares CAN, COULD, MAY, MIGHT, MUST, SHOULD y OUGHT TO.

A) GRAMMATICAL EXERCISES

- IV. 2.1. Relate both columns inserting the number that corresponds.



- | | |
|-------------|---|
| 1. Can | (7) Deber moral para consejo. |
| 2. Could | (5) Deber obligatorio |
| 3. May | (1) Poder-habilidad física - PRESENTE |
| 4. Might | (3) Poder-permiso, probabilidad |
| 5. Must | (6) Deber moral |
| 6. Should | (2) Poder físico - PASADO Y CONDICIONAL |
| 7. Ought to | (4) Poder, tal vez. |

- IV. 2.2. Apply the corresponding auxiliaries (CAN or COULD) and then change the following sentences to the interrogative form.

- Our teacher can speak French too. (Poder - habilidad física - presente).
Can our teacher speak French too ?
- Betsy and Liza could help their mother. (Poder - habilidad física - condicional).
Could betsy and Liza help their mother ?
- A cat can run faster than a dog. (Poder - habilidad física - presente).
Can a cat run faster than a dog ?
- Children can learn foreign languages better than adults. (Poder - habilidad física - Presente).
Can children learn foreign languages better than adults ?
- You could write the letter better than I. (Poder habilidad física - Condicional).
Could you write the letter better than I ?
- Donna Summer could sing many hours without resting. (Poder habilidad física - Pasado).
Could Donna Summer sing many hours without resting ?
- Nadia Comanechi can teach gymnastics to children and adults. (Poder habilidad física - Presente).
Can Nadia Comanechi teach gymnastics to children and adults ?

8. Toño could eat all of the fish. (Poder habilidad física - Pasado).
could Toño eat all of the fish?
9. Julie could go to the dance with Henry. (Poder habilidad física - Condicional).
could Julie go to the dance with Henry?
10. Peter and Alice could pass all of the exams the last semester. (Poder habilidad física - Pasado).
could Peter and Alice pass all of the exams the last semester.

IV.2.3. Change the sentences of Exercise IV.2.2. to the negative form and translate them to Spanish.

1. Our teacher can't speak French too.
Nuestro maestro no puede hablar francés
2. Betsy and Liza couldn't help their mother.
Betsy y Liza no podían ayudar a su madre
3. A cat can't run faster a dog.
Un gato no puede correr más rápido que un perro
4. Children can't learn foreign than adults.
Los niños no puede aprender que los adultos
5. You couldn't write a letter better than I.
Tú no podrías escribir una carta mejor que yo
6. Donna Summer couldn't sing many hours without resting.
Donna Summer no podía cantar muchas horas
7. Nadia Comaneci can't teach gymnastics to children and adults.
Nadia Comaneci no puede enseñar gimnasia a niños y adultos
8. Tono couldn't eat all of the fish.
Tono no podía comerse todo el pescado
9. Julia couldn't go to the dance with Henry.
Julia no podía ir al baile con Enrique
10. Peter and Alice couldn't pass all of the exams the last semester.
Peter y Alice no pudieron pasar todos los exámenes el semestre pasado

IV.2.4. Apply the corresponding auxiliaries (MAY or MIGHT) and then change the following sentences to the interrogative form.

1. The weather May change tomorrow. (Poder probabilidad - Presente).
May the weather change tomorrow?
2. The teacher said we might go. (Poder permiso - Pasado).
Might the teacher said we go?
3. Peter and Jane might finish their high school this year. (Poder probabilidad - condicional).
Might Peter and Jane finish their high school this year?
4. Excuse me, May I borrow your pen? (Poder permiso - Presente)
May Excuse me I borrow your pen?
5. I May help you if you wait for me. (Poder probabilidad - Presente).
May I help you if you wait for me?
6. The Principal thought that Betty might have written the letter. (Poder probabilidad - Pasado).
Might The principal thought that Betty have written the letter?
7. You Might have enjoyed the concert if you liked good music. (Poder probabilidad - Condicional).
Might you have enjoyed the concert if you liked good music?
8. We May begin our work tomorrow. (Poder probabilidad - presente).
May we begin our work tomorrow?
9. Mother, May I read my new book? (Poder permiso - Presente).
May Mother I read my new book?
10. The Globetrotters Might play in Monterrey next week. (Poder probabilidad - Condicional).
Might The Globetrotter play in Monterrey next week?

IV.2.5. Apply the auxiliary (MUST) according to the verbs in parenthesis and then change the following sentences to the interrogative form.

1. You must finish the exam in half an hour. (TO FINISH)
Must you finish the exam in half an hour?
2. Elisa Must take her medicine every six hours. (TO TAKE)
Must Elisa take her medicine every six hours?
3. Betsy Must answer the letter before Ernest comes. (TO ANSWER)
Must Betsy answer the letter before Ernest comes?

4. George and Gerard must stay in bed because they are sick. (TO STAY)
Must George and Gerard stay in bed because They are sick?
5. We must paint the desk and the walls. (TO PAINT)
Must We paint the desk and the walls ?
6. This lesson is very important; they must learn it. (TO LEARN)
This lesson is very important Must they learn it ?
7. David talks too much in class he must keep quiet. (TO KEEP)
David talks too much in class must he keep quiet ?
8. I'm getting hungry, I must have something to eat. (TO HAVE)
I'm getting hungry, must I have something to eat ?
9. The maid left the table dirty; she must clean it. (TO CLEAN)
The maid left the table dirty, must she clean it ?
10. Willis is getting cold, he must put his sweater on. (TO PUT)
Willis is gettin cold,must he put his sweater on

IV.3.6. Change the sentences of Exercise IV.3.6. to the negative form and translate them to Spanish.

1. You must not finish the exam in half an hour
Tu no debes terminar el examen en media hora
2. Elisa must not take her medicine every six hours
Elisa no debe tomar su medicina cada seis horas
3. Betsy must not answer the letter before Ernest comes
Betsy no debe contestar la carta antes que venga Ernesto
4. George and Gerard must not stay in bed because they are sick
Jorge y Gerardo no deben permanecer en cama porque estan enfermos
5. We must not paint the desk and the walls
Nosotros no debemos pintar el escritorio y los paredes
6. This lesson is very important they must not learn it
esta lección es muy importante, Ellos no deben aprender
7. David don't talk to much in class, he must not keep quiet.
David no habla mucho en clases, el no debe estar quieto
8. _____
9. _____

10. _____

IV.2.7. Apply the corresponding auxiliaries (SHOULD or OUGHT TO) and then change the following sentences to the interrogative form.

1. We ought To tell them. (Deber - consejo)
_____ ?
2. They should be there by now. (Deber - moral)
should they be there by now ?
3. You ought to have been with us yesterday to review the lesson. (Deber - consejo)
_____ ?
4. Sally ought to take her medicine to get well. (Deber - consejo)
_____ ?
5. You should write to him at once. (Deber moral)
should you write to him at once ?
6. Henry should tell his son the truth. (Deber moral)
should henry tell his son the truth ?
7. Miriam ought to play with us because we're the best team. (Deber - consejo)
_____ ?
8. You should study more to get better grades. (Deber moral)
should you study more to get better grades ?
9. Peter should follow a correct diet. (Deber - moral)
should Peter follow a correct diet ?
10. Paul and Jane ought to listen to their father's advise. (Deber - consejo)
_____ ?

IV.2.8. Change the sentences of exercise IV.3.7. to the negative form and translate them to Spanish.

1. _____
2. _____

3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

V.1 READINGS

A) PRELIMINARY CONCEPTS IN ENGINEERING

Engineering deals with different physical quantities in Engineering. They can be divided into two types: scalar and vector quantities. Both have size or magnitude but only vector quantities have direction. Force which we measure in Newton possess magnitude and direction. That is, force is a vector quantity. Other examples are acceleration and velocity.

Some more quantities can be represented by a vector. The diagram below shows a vector \vec{a} . In the diagram \vec{a} is a vector which represents a force. If we calculate its length we find that it is proportional to the magnitude of the force. The direction of the line indicates the direction of the force. It's important also to know in what sense of direction the force is acting. The arrow head of the line shows that the sense of direction of the force is upwards.

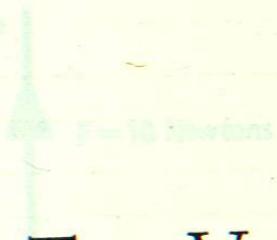


Fig. 10 Questions

UNIT V

Engineering quantities are measured by giving their magnitude to a suitable unit of measurement. For example, we measure the mass of a body as a quantity of grams, the capacity of a vessel as a quantity of cubic meters and a period of time as as many seconds. We use scales to measure magnitudes by points or divisions on a scale. Thus, a clock is a scale for measuring time. Similarly, a meter stick is a scale for measuring length and a thermometer is a scale for measuring heat.