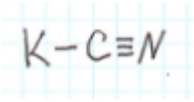
What type of bond is KCN
Is it a single bond
Is it a double bond
Is it a triple bond

Solution. In the resolution of this issue we will proceed from the definition of valence. Valency is the number of chemical bonds formed by an atom in a compound. Next, we use the periodic system of Mendeleev. Potassium is in the first group, so its valence is 1. Carbon is in the fourth group, so its valence is 4. Nitrogen is in the fifth group, but its valence will be calculated as follows. There are only eight groups, and nitrogen is in the fifth group, then the nitrogen valence is 8-5 = 3.
Further, we know that bonds are formed by the generalization of external electrons in atoms. And gave the definition of valence. That is, potassium should realize a single bond, carbon - a quadruple bond, and nitrogen a triple bond, then the bond between carbon and potassium will be single, and between nitrogen and carbon - triple. Draw the connection in terms of the above:



Answer: It is a single bond and it is a triple bond.