1. Is { } computable? Justify your answer.
2. A positive integer *n* is *perfect* if *n* is the sum of its proper divisors. For example, 6 is perfect because 6 = 1 + 2 + 3. Show that the set of perfect integers is computable.
3. Let *B* = {*n* | *n* is a positive integer that can be expressed as the sum of two prime numbers}. For example, 8 $\in $ *B* since 8 = 5 + 3. Show that *B* is computable.
4. Prove that every finite language is computable.
5. Give an example of an infinite computable set.