# Lesson 2 Quiz (5 minutes)

## Question 1

A) _____ is the class of decision problems that can be solved by non-deterministic polynomial algorithms.

a) NP
b) P
c) Hard
d) Complete

Answer: A)
Explanation: NP problems are called as non-deterministic polynomial problems. They are a class of decision problems that can be solved using NP algorithms.

## Question 2

The sum and composition of two polynomials are always polynomials.

A) true
B) false

Answer: A)

Explanation: One of the properties of polynomial functions states that the sum and composition of two polynomials are always polynomials.

## Question 3

Let S be an NP-complete problem and Q and R be two other problems not known to be in NP. Q is polynomial time reducible to S and S is polynomial-time reducible to R. Which one of the following statements is true?

A) R is NP-complete
B) R is NP-hard
C) Q is NP-complete
D) Q is NP-hard

Answer: B) Correct because a NP Complete problem S is polynomial time educable to R.