Consider the language represented by the regular expression ^ + bb\* + ccc\*.

* Is ^ a language? **Yes**
* Is b in this language? **Yes**
* Is c in this language? **No**
* Is bc in this language? **No**
* Is bcc in this language? **No**
* Is bbccc in this language? **No**
* Is bbbccc in this language? **No**

Consider the language represented by the regular expression bb\*ccc\*.

* Is ^ in this language? **No**
* Is b in this language? **No**
* Is c in this language? **No**
* Is bc in this language? **No**
* Is bcc in this language? **Yes**
* Is bbccc in this language? **Yes**
* Is bbbccc in this language? **Yes**

Consider the language {a*n*b*n* | n ∈ N}.

* Is ^ in this language? **Yes**
* Is a in this language? **No**
* Is ab in this language? **Yes**
* Is aabb in this language? **Yes**
* Is abab in this language? **No**

Consider the language {c*q*d*r* | q, r ∈ N}.

* Is ^ in this language? **Yes**
* Is c in this language? **Yes**
* Is cd in this language? **Yes**
* Is ccdd in this language? **Yes**
* Is cdcd in this language? **No**

Which of the following is the language described by the regular expression a + bc? **{a, bc}**

Which of the following is the language described by the regular expression (ab)\*c\*de?

**{^, ab, abab, ababab, …}{^, c, cc, ccc, …}{de}**

Which of the following is a regular expression that describes the language

{abc*n*d*m*e*q + 1* | n, m, q ∈ N}? **abc\*d\*ee\***

Which of the following is a regular expression that represents the set of all strings over the alphabet {a, b, c, d} that are at least two characters long and begin and end with a b?

**b(a + b + c + d)\*b**

Which of the following is a regular expression that represents the set of all strings over the alphabet {a, b, c, d} that contain an odd number of copies of the letter ‘b’?

**(a + c + d)\*b(a + bb + c + d)\***