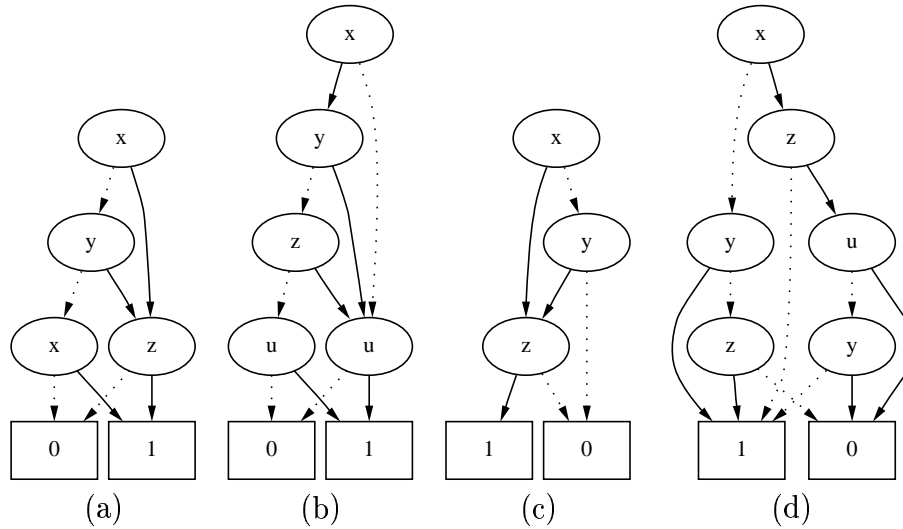


### Problem 3 (10%)

Consider the following four BDDs.



#### Question 3.1

Which of the BDDs (a)–(d) are not ROBDDs, i.e., which are either not ordered or not reduced? Give you answer by filling in a table as below:

BDD	a	b	c	d
R				
O				

**Solution:**

BDD	a	b	c	d
R	+	-	+	+
O	-	+	+	-

#### Question 3.2

For each of the BDDs (a)–(d) that are not ROBDDs, show a corresponding ROBDD.

**Solution:** The corresponding ROBDDs for (a), (b), and (d) are:

