HW1: Forward vs. Backward Chaining (Updated)

Consider the following rules for **the selection of a notebook computer.**

Rule 1:
IF the primary task = word processing or web browsing
AND primary usage = office
THEN weight requirement = don't care

Rule 2:
IF the primary task = word processing or web browsing
AND primary usage = travel
THEN weight requirement = light

Rule 3:
IF the primary task <> (word processing or web browsing)
THEN budget > 1500

Rule 4:
IF budget > 2000
AND weight requirement = light
THEN NB model = Sony Vaio Z1

Rule 5:
IF budget <= 2000 AND budget > 1000
AND weight requirement = light
THEN NB model = Dell Latitude X1

Rule 6:
IF budget < 1000
AND weight requirement = don't care
THEN NB model = Toshiba Satellite A1000

Assume that the primary usage of a notebook (NB model) is word processing while travelling and your budget is $1800, show how each chaining method activates the rules

above (i.e., write the sequence of activation using the rule numbers and arrows) and arrives at its conclusion (i.e., write the conclusion).
(Hint: For the backward chaining in this case, your initial goal is ?- NBmodel(X))

Forward Chaining:

Backward Chaining: