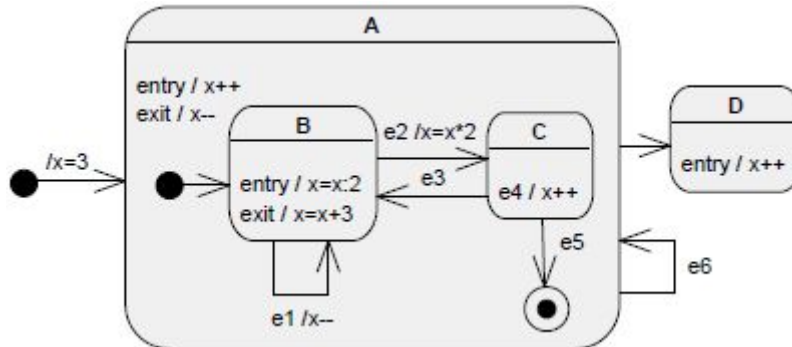# MDS
## Primeiro semestre 2016/2017
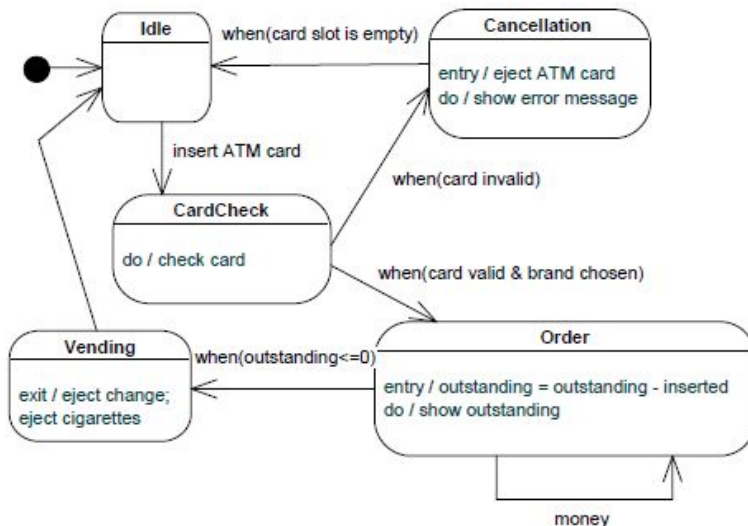## Quiz 5
### Version A
## 5/12/2016

1 - Consider the following Statechart:



What is the value of x after the occurrence of the event chain
**e1 e2 e4 e4 e6 e1** ?:

Answer: 4

**2** - You are given the following state machine diagram.



Which of the following sequences is correct?

    A. The machine has a transition from Vending to Idle. It would also be possible to model a transition from Vending to the initial state (which directly links further to Idle).
    B. After the customer has inserted enough money into the machine, a transition to Order takes place.
    C. If CardCheck is active and the card is valid, Order immediately becomes the next active state.
    D. The state Idle becomes active, as soon as the customer has taken change and cigarettes out of the machine.
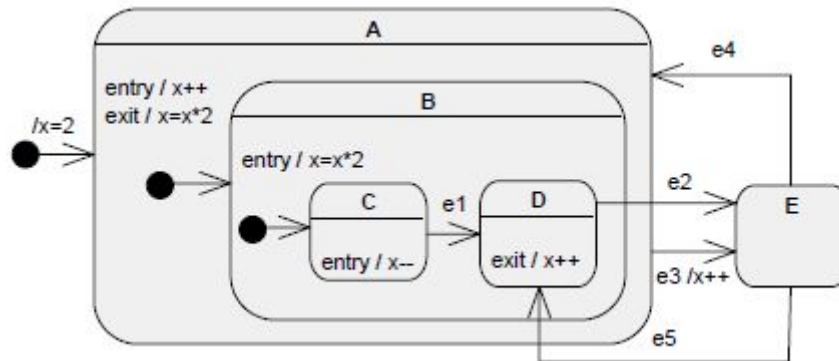    E. None of the above

# MDS
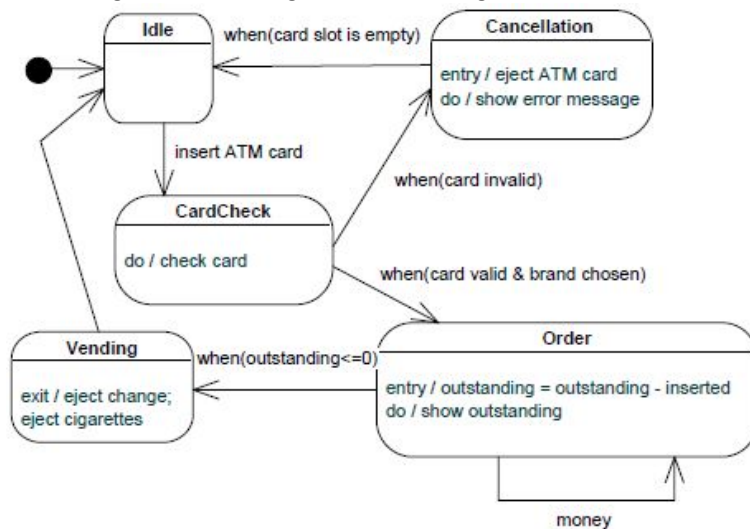## Primeiro semestre 2016/2017
## Quiz 5
Version B
## 5/12/2016

1 - Consider the following Statechart:



What is the value of x after the occurrence of the event chain
**e1 e2 e4 e2 e1**?:

Answer: 25

**2** - You are given the following state machine diagram.



Which of the following sequences is correct?

  A.    The modeled cigarette vending machine also accepts payment with the quick-function of an ATM card.
  B.    The state Idle becomes active, as soon as the customer has taken change and cigarettes out of the machine.
  C.    As soon as change and cigarettes have been ejected, Idle becomes the next active state.
  D.    If CardCheck is active and the card is valid, Order immediately becomes the next active state.
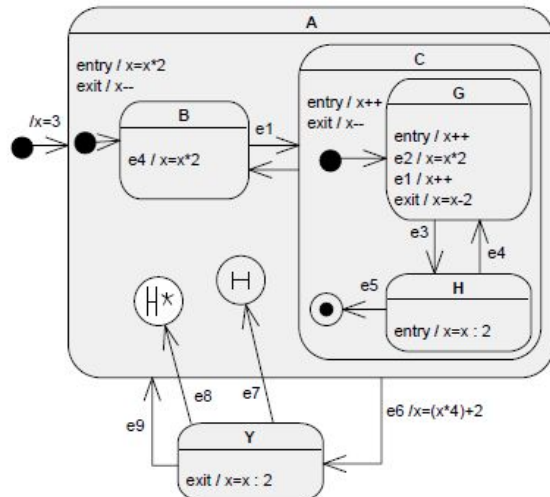  E.    None of the above

# MDS

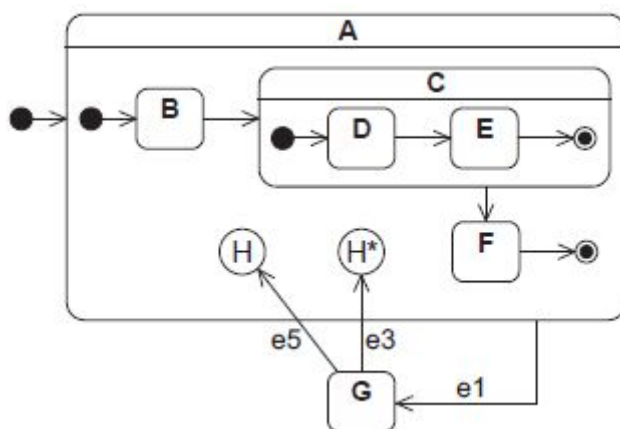## Primeiro semestre 2016/2017
## Quiz 5
Version C
## 5/12/2016

1 - Consider the following Statechart:



What is the value of x after the occurrence of the event chain
**e1 e6 e9 e1 e3**?:

Answer: 9

**2** - You are given the following state machine diagram.



Which of the following sequences is correct?

    A.    Assuming state E is active and the event e1 occurs, G becomes the next active state. If now e3 occurs, C and more concretely D becomes the next active state.
    B.    It is possible, that C and F are active at the same time.
    C.    Assuming state G is active and the event e5 occurs, then B becomes the next active state - regardless of which sub-state was active before.
    D.    In the beginning, state B is active.
    E.    None of the above
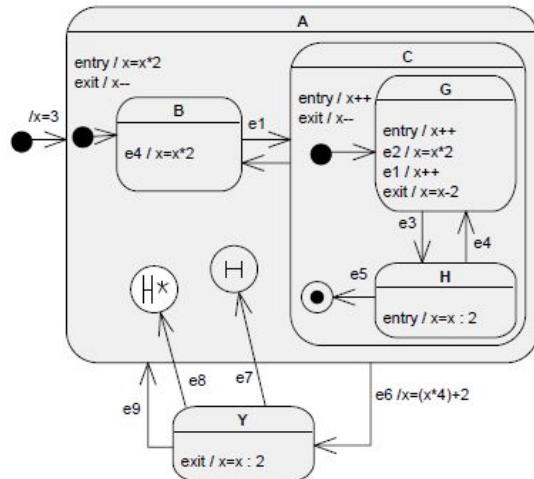
# MDS
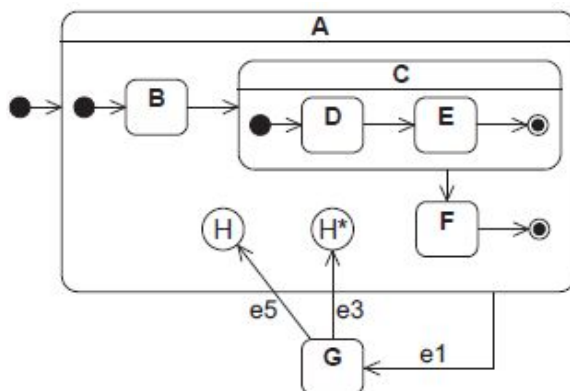## Primeiro semestre 2016/2017
## Quiz 5
Version D
## 5/12/2016

1 - Consider the following Statechart:



What is the value of x after the occurrence of the event chain
**e1 e3 e6 e8 e5 e4**?:

Answer: 5

**2** - You are given the following state machine diagram.



Which of the following sequences is correct?

A.  Assuming state E is active and the event e1 occurs, G becomes the next active state. If now e3 occurs, C and more concretely D becomes the next active state.
B.  It is possible, that C and F are active at the same time.
C.  Assuming state G is active and the event e5 occurs, then B becomes the next active state - regardless of which sub-state was active before.
D.  Assuming state E is active and the event e1 occurs, then G becomes the next active state. As soon as e5 occurs, C and more specifically D becomes active.
E.  None of the above