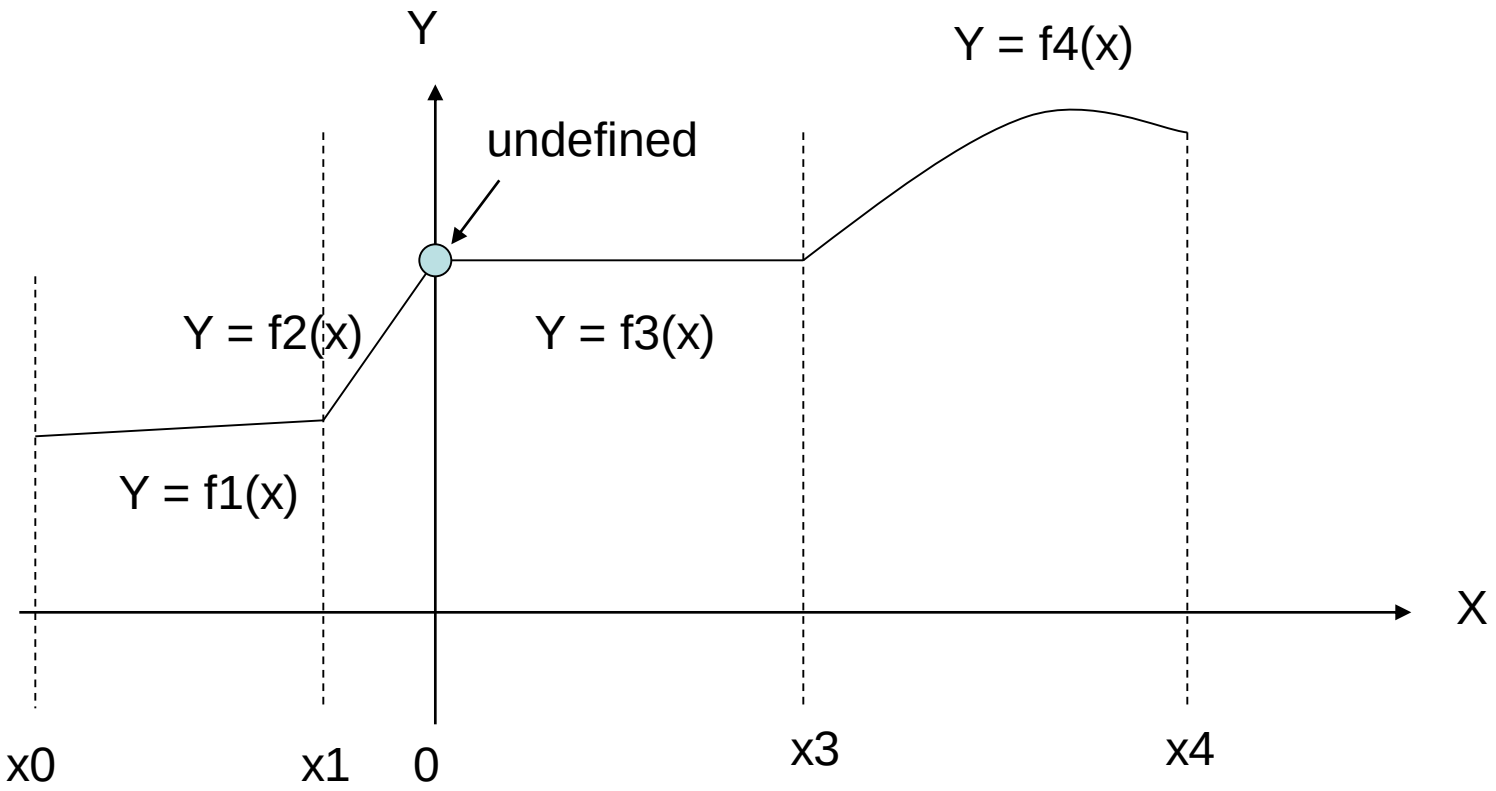
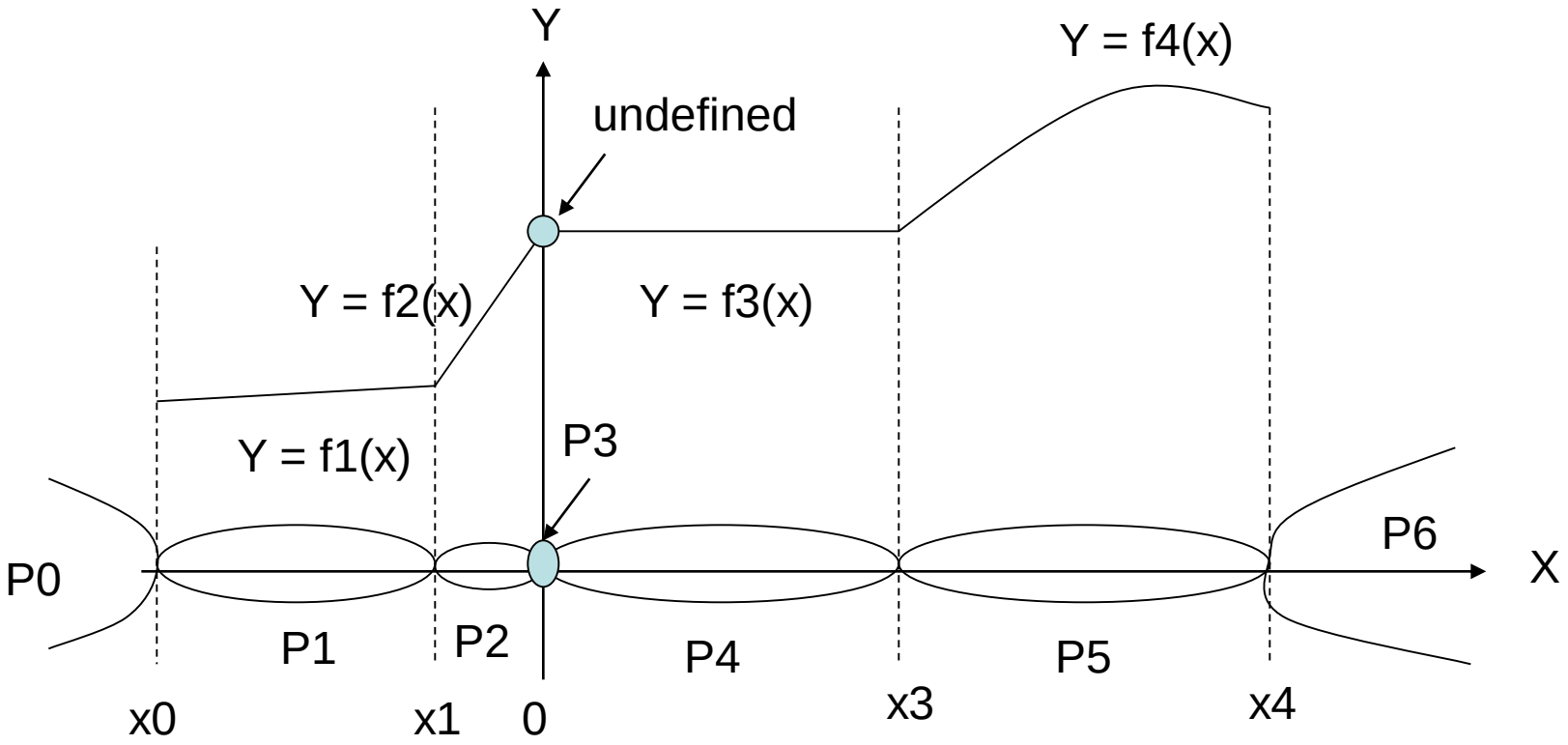
Equivalence Partition Testing Example



$$Y = \begin{cases} f1(x) & x \in [x0, x1] \\ f2(x) & x \in (x1, 0) \\ \text{Undefined} & x = 0 \\ f3(x) & x \in (0, x3] \\ f4(x) & x \in (x3, x4] \end{cases}$$

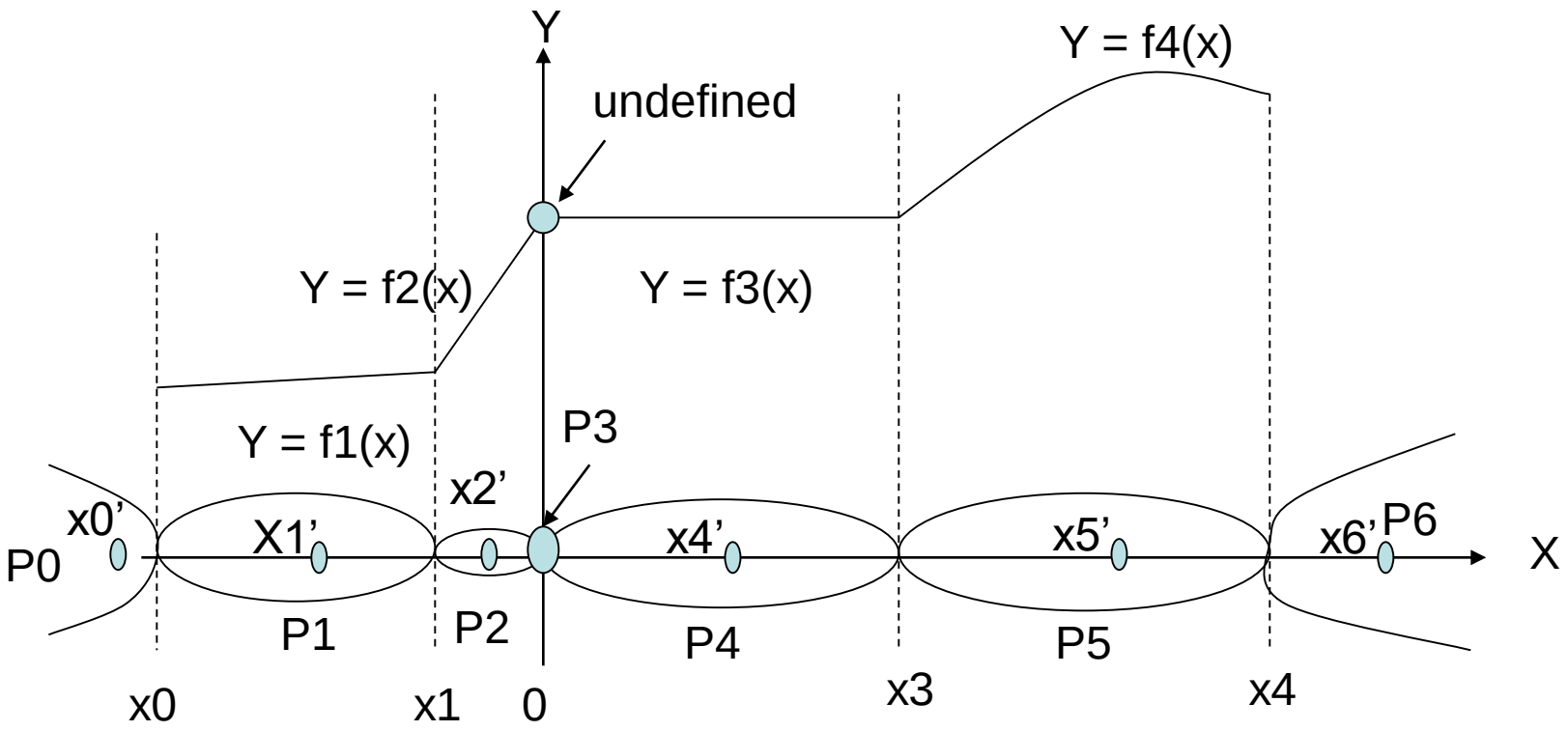
Equivalence Partition Testing Example



EQ Partitions:

P0: x < x0 or x in (x0, Very Small No.)
P1: x in [x0, x1]
P2: x in (x1, 0)
P3: x = 0
P4: x in (0, x3]
P5: x in (x3, x4]
P6: x > x4 or x in (x4, Very Larger No.)

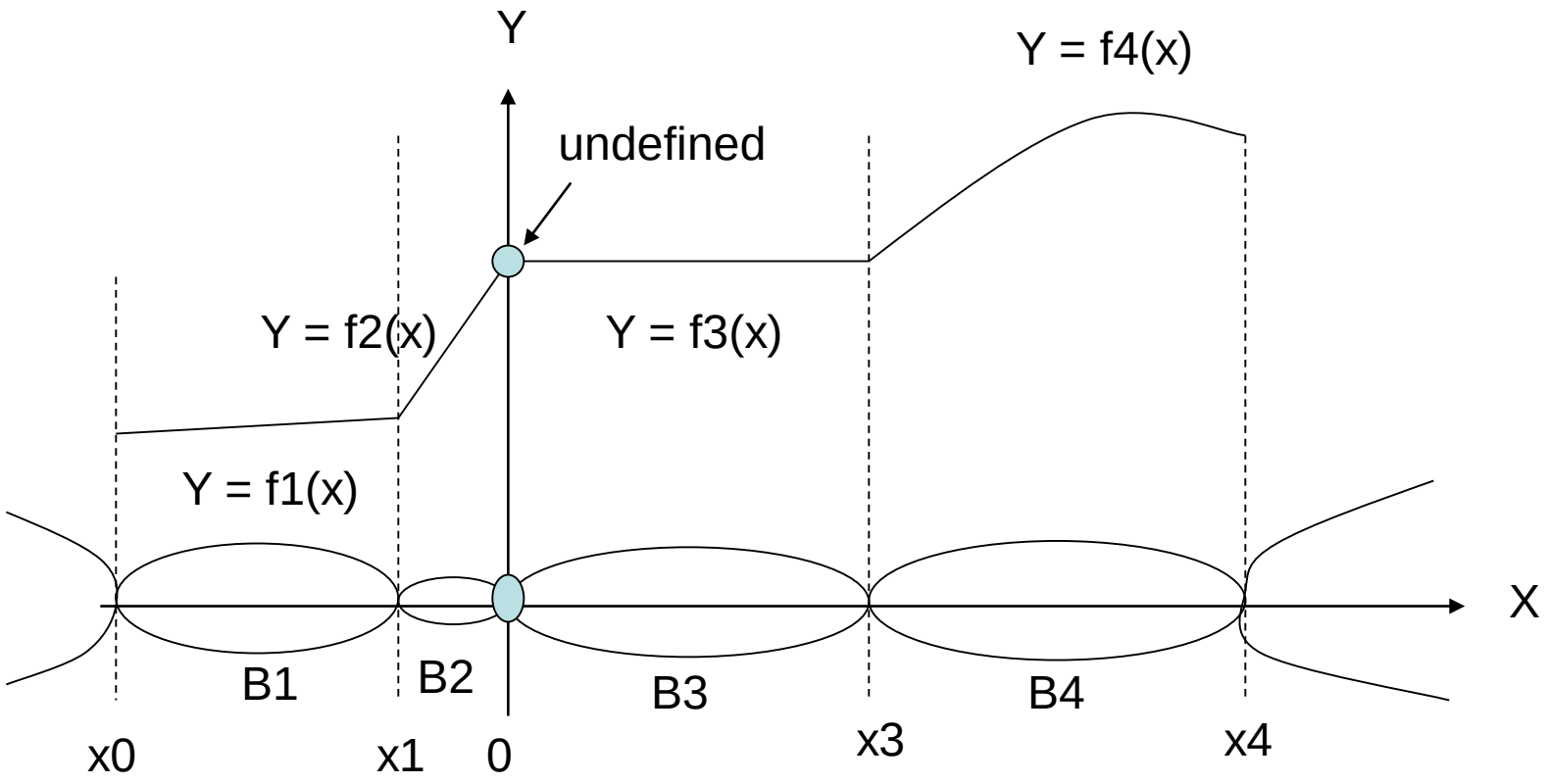
Equivalence Partition Testing Example



Test Cases for EQ Partitions:

x= x1', y = f1(x1') = y1'
x = x2', y = f2(x2') = y2'
x = 0, y = 0
x = x4', y = f3(x4') = y3'
x = x5', y = f4(x5') = y4'
x = x0', y = out of boundary
x = x6', y = out of boundary

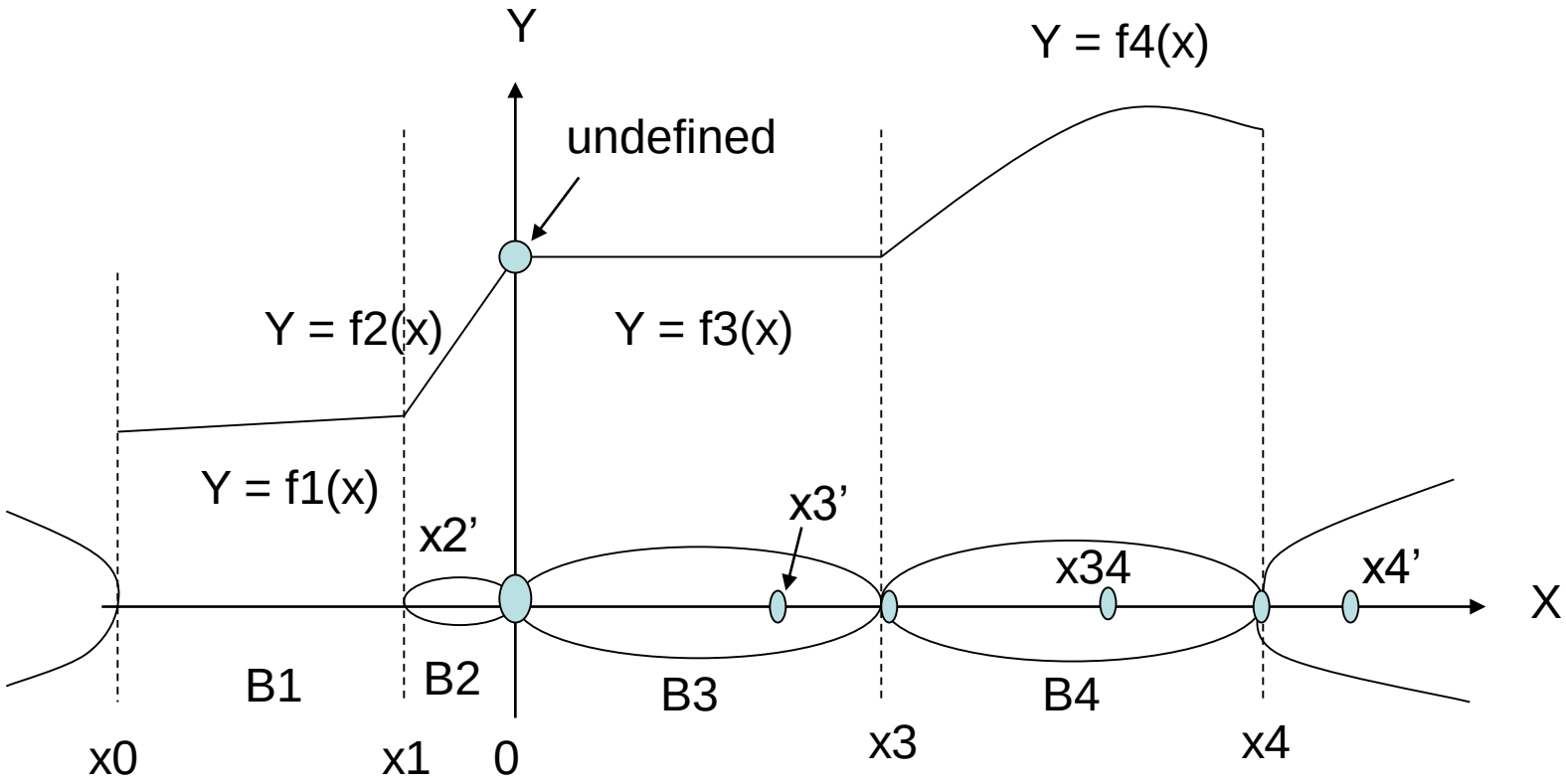
Boundary Value Analysis Testing Example



Existing Boundaries:

B1: x in [x0, x1]
B2: x in (x1, 0)
B3: x in (0, x3)
B4: x in [x3, x4]

Boundary Value Analysis Testing Example



Test Cases for Boundary #4:

x = x3', y = f3(x3'), check y = ?
x = x3, y = f4(x3), check y = ?
x = x34, y = f4(x34), check y=?
x = x4, y = f4(x), check y=?
x =x4', y = out of boundary