# crossing_signals-20.imi

spec

| l1 | True |

$s_1 > s_2$
greater

$nb < 20$
& $s_2 > s_1$
smaller
$nb := nb + 1;$

| 3 clocks | 1 parameter | 1 discrete | Initial |
|---|---|---|---|
| x<br>s_1<br>s_2 | p | nb | p >= 0<br>& x = 0 |

| l2 | True |

$nb = 20$
& $s_2 > s_1$
smaller
$x := 0;$

| wait10 | p >= x |

$p = x$
& $s_1 = 3*s_2$
satisfied

| acc | lfinal | True |

signal_1

| stabilized | True |
| | $s_1' = 0$ |

increase_slow_1        stabilize_1

$s_1 > 0$
decrease_slow_1          stabilize_1

| increasing_slow | True |
| | $s_1' = 1$ |

| decreasing_slow | $s_1 >= 0$ |
| | $s_1' = -1$ |

signal_2

| stabilized | True |
| | $s_2' = 0$ |

increase_slow_2        stabilize_2

$s_2 > 0$
decrease_slow_2          stabilize_2

| increasing_slow | True |
| | $s_2' = 1$ |

| decreasing_slow | $s_2 >= 0$ |
| | $s_2' = -1$ |