3.23 Timing diagrams

A *timing diagram* graphically shows a circuit's output values for given input values that change over time. Each signal (input name is listed on the left. Time proceeds to the right. Each signal is drawn as a high line (1) or a low line (0).
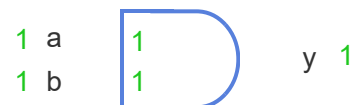

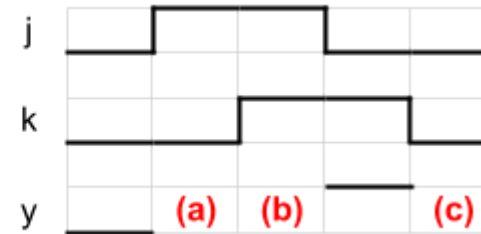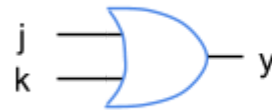**PARTICIPATION ACTIVITY**   3.23.1: Timing diagram for an AND gate.

Start   ☐ 2x speed

1 a
1 b   1
           1   y   1

Timing diagram

a   1
     0

b   1
     0

y   1
     0

PARTICIPATION ACTIVITY   3.23.2: Timing diagram.
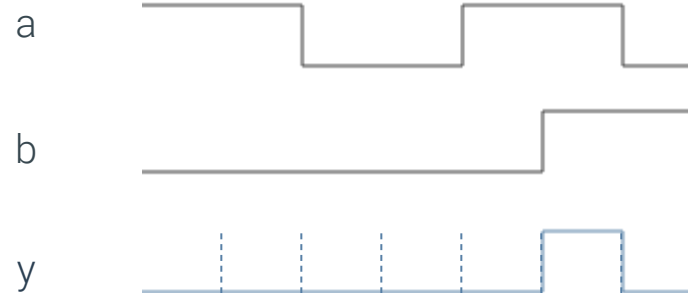
Complete the timing diagram.

1) (a)

  ○ 0

  ○ 1

2) (b)

  ○ 0

  ○ 1

3) (c)

  ○ 0

  ○ 1

| CHALLENGE ACTIVITY | 3.23.1: Timing diagram. |

Indicate y's value over time. Click on the y's waveform to adjust it.

Start

a

b

y

| 1 | 2 | 3 | 4 |

Check   Next

! **Provide feedback on this section**