

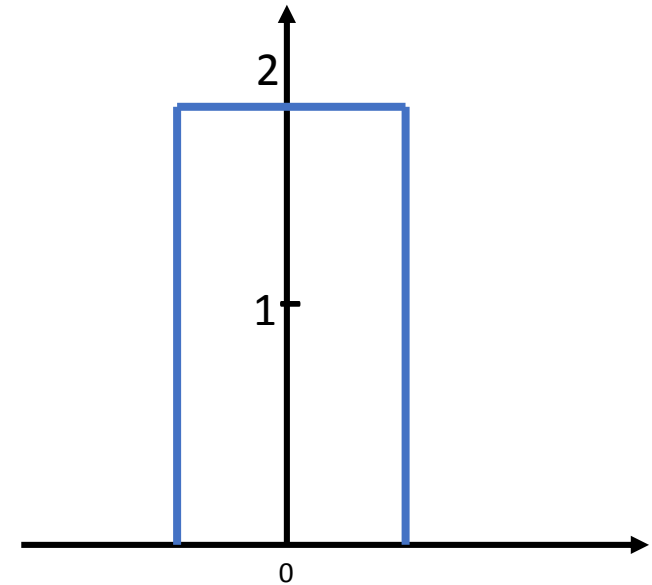
CS 111 Quiz #2: Instructions

- 8 questions
- Each question displayed for **one minute only**
- Record your responses for each question using your clickers/Reef app
- Record your responses when polling starts for that question
- If you miss a question, you will not receive any credit for it

Question #1

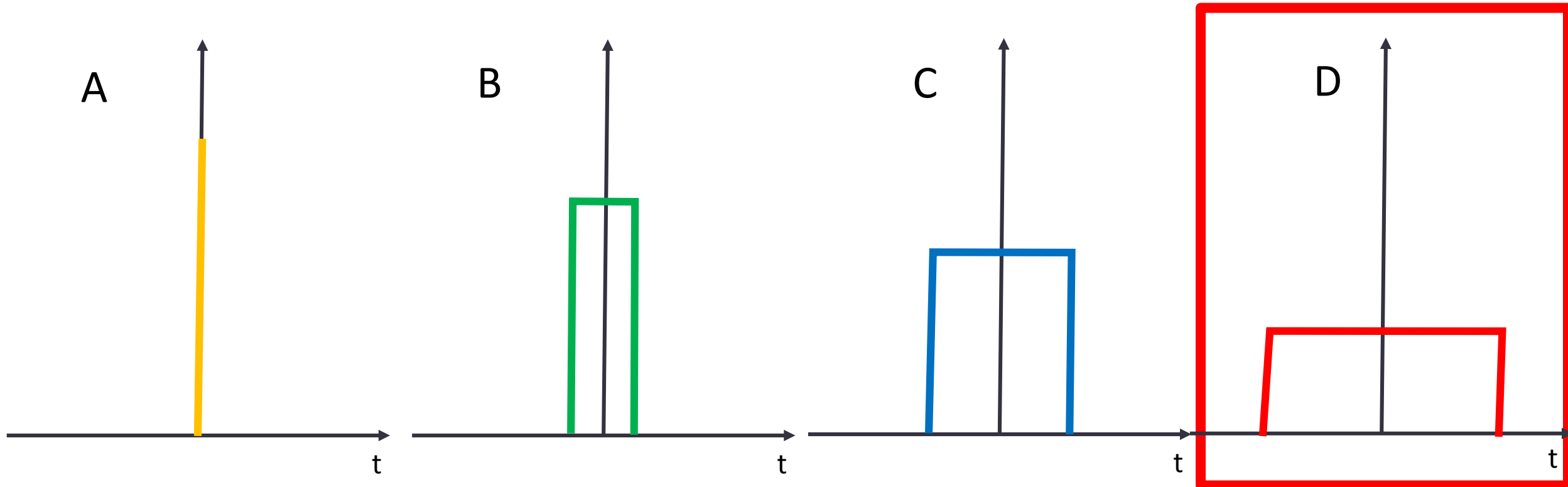
What does the following impulse response do to a signal?

- A. Blur
- B. Amplify
- C. Delay
- D. Both A & B**
- E. None of the above



Question #2

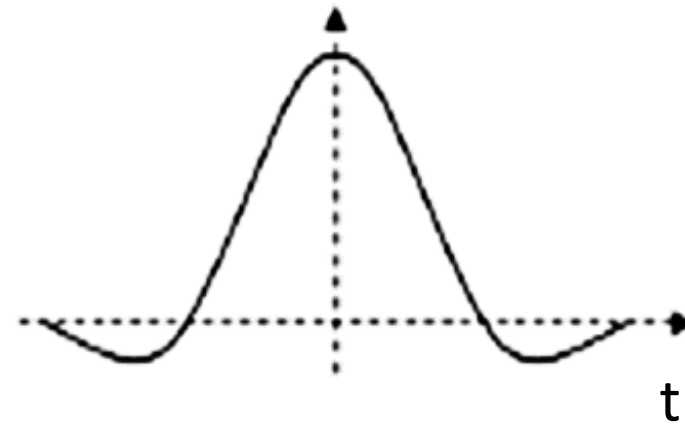
Which of the following filters will remove the most amount of frequencies from the input?



Question #3

What type of filter does the figure represent?

- A. Band-pass filter
- B. High-pass filter**
- C. Low-pass filter
- D. Median filter
- E. Notch filter



Question #4

Let us consider a signal $x(t)$. Consider this operation $\frac{1}{2}(x(t)*\delta(t) + x(t)*\delta(t-1))$. This is equivalent to:

- A. Band-pass filtering of x
- B. High-pass filtering of x
- C. **Low-pass filtering of x**
- D. None of the above

t

Question #5

Laplacian pyramid provides:

- A. Low-pass filtering
- B. High-pass filtering
- C. **Band-pass filtering**
- D. None of the above

Question #6

Gaussian pyramid provides:

- A. High-pass filtering
- B. Low-pass filtering**
- C. Band-pass filtering
- D. None of the above

Question #7

If we widen the support of a filter in the spatial domain, its frequency domain response?

- A. Expands
- B. Shrinks**
- C. Remains the same
- D. None of the above

Question #8

As we go to subsequent levels of the Gaussian pyramid starting with the original image, the sampling requirement

A. Increases

B. Decreases

C. Remains the same

D. No effect

t