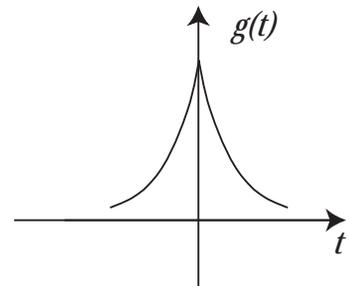
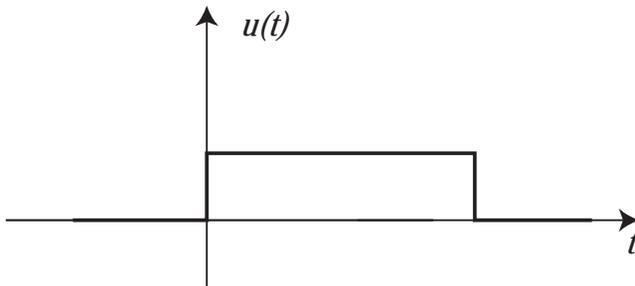


Response of Smoother to Pulse

A pulse, $u(t)$, is the input to a smoother, with impulse response $g(t)$.



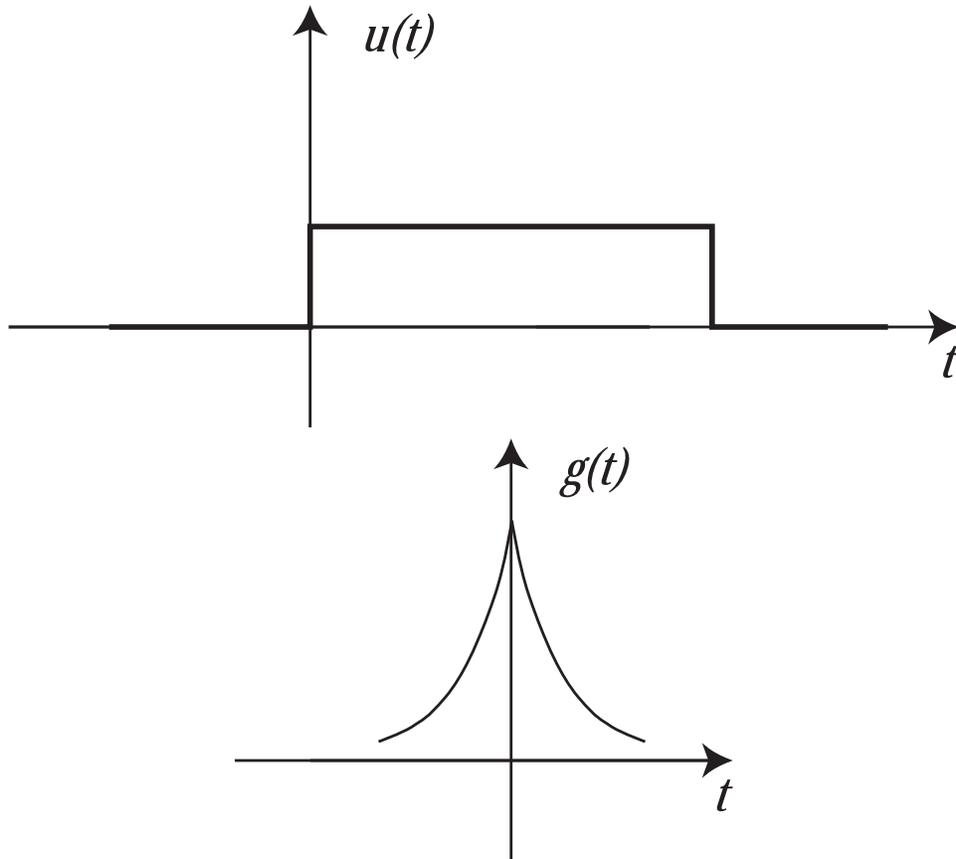
Sketch the output, $y(t)$.

My confidence that I have the correct answer is:

1. 100%
2. 80%
3. 60%
4. 40%
5. 20%
6. 0%

Response of Smoother to Pulse

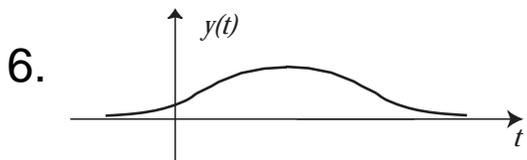
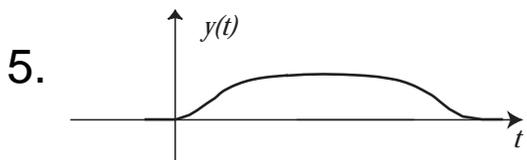
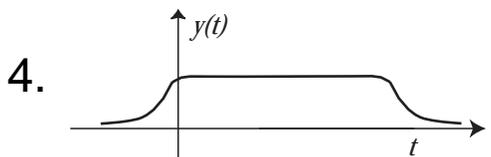
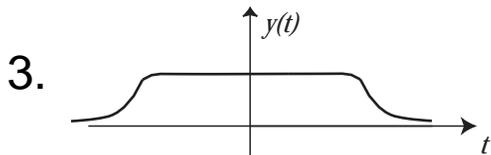
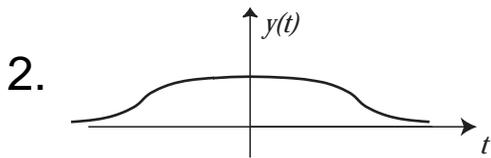
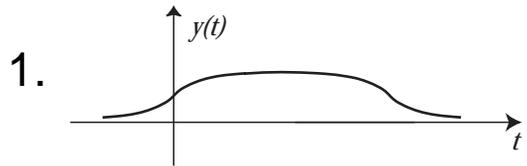
A pulse, $u(t)$, is the input to a smoother, with impulse response $g(t)$.



Sketch the output, $y(t)$.

Response of Smoother to Pulse

My answer looks most like:



7. Some combination of the above

8. None of the above

Response to Bilateral Signal

A system G has impulse response

$$g(t) = e^{-at}\sigma(t)$$

with $a > 0$. Find the response, $y(t)$, of the system to the input

$$u(t) = e^{at}\sigma(-t)$$

using Laplace transform methods.

My confidence that I have the correct answer is:

1. 100%
2. 80%
3. 60%
4. 40%
5. 20%
6. 0%

Response to Bilateral Signal

The response of a system G with impulse response

$$g(t) = e^{-at}\sigma(t)$$

to the input

$$u(t) = e^{at}\sigma(-t)$$

is

$$y(t) = \frac{1}{2a}e^{-at}\sigma(t) + \frac{1}{2a}e^{at}\sigma(-t)$$

My answer

1. Was completely correct
2. Was mostly correct, with one or two minor errors
3. Had many errors
4. Was completely incorrect