## Graphical Interpretation of Convolution I

The convolution integral is

$$
g(t) * u(t)=\int_{-\infty}^{\infty} g(t-\tau) u(\tau) d \tau
$$

Plot $g(t-\tau)$ as a function of $\tau$, for $g(t)$ and $t$ as shown.



## Graphical Interpretation of Convolution I

Plot $g(t-\tau)$ as a function of $\tau$, for $g(t)$ and $t$ as shown.


My confidence that I have the correct answer is:

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

## Graphical Interpretation of Convolution I

The plot of $g(t-\tau)$ is given by


My answer

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

## Graphical Interpretation of Convolution II

The signals $g(t)$ and $u(t)$ are as plotted below. Plot $g(t-\tau) u(\tau)$ as a function of $\tau$.




## Graphical Interpretation of Convolution II

Plot $g(t-\tau) u(\tau)$ as a function of $\tau$, for $g(t)$ and $u(t)$ as shown.


My confidence that I have the correct answer is:

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

## Graphical Interpretation of Convolution II

The plot of $g(t-\tau)$ is given by


My answer

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