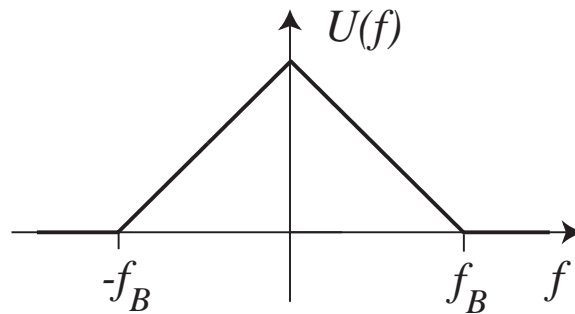


Amplitude Modulation with Carrier

Consider the signal

$$y(t) = \cos(2\pi f_c t) [A + u(t)]$$

where $w(t) = \cos(2\pi f_c t)$ is the carrier signal, $u(t)$ is the modulating signal, and A is a constant. $u(t)$ has spectrum (Fourier transform) as shown below:



The carrier frequency, f_c , is much greater than the bandwidth, f_B , of the modulating signal. Sketch the transform of the signal $y(t)$ on a 3×5 card.

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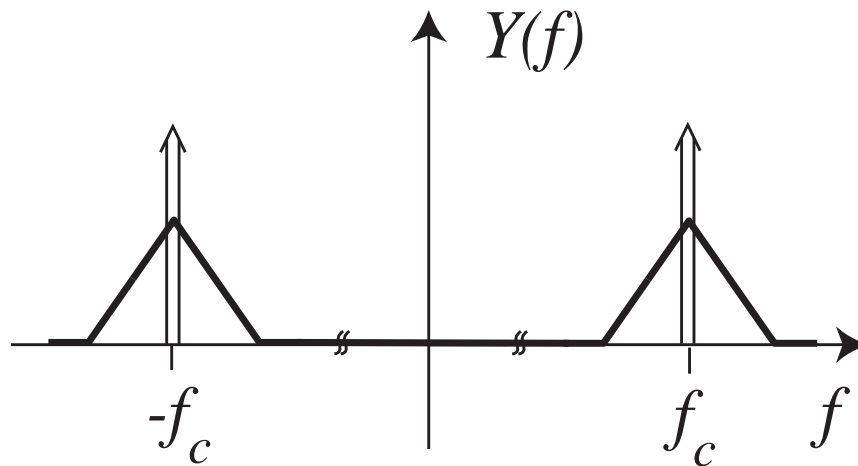
where $w(t) = \cos(2\pi f_c t)$ is the carrier signal, $u(t)$ is the modulating signal, and A is a constant. The carrier frequency, f_c , is much greater than the bandwidth, f_B , of the modulating signal. Sketch the transform of the signal $y(t)$ on a 3×5 card.

My confidence that I have the correct answer is:

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

Amplitude Modulation with Carrier

The transform of $y(t)$ 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