Amplitude Modulation

Consider the signal

 $y(t) = \cos(2\pi f_c t)u(t)$

where $w(t) = \cos(2\pi f_c t)$ is the carrier signal, and u(t) is the modulating signal. 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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 $y(t) = \cos(2\pi f_c t)u(t)$

where $w(t) = \cos(2\pi f_c t)$ is the carrier signal, and u(t)is the modulating signal. 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

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