

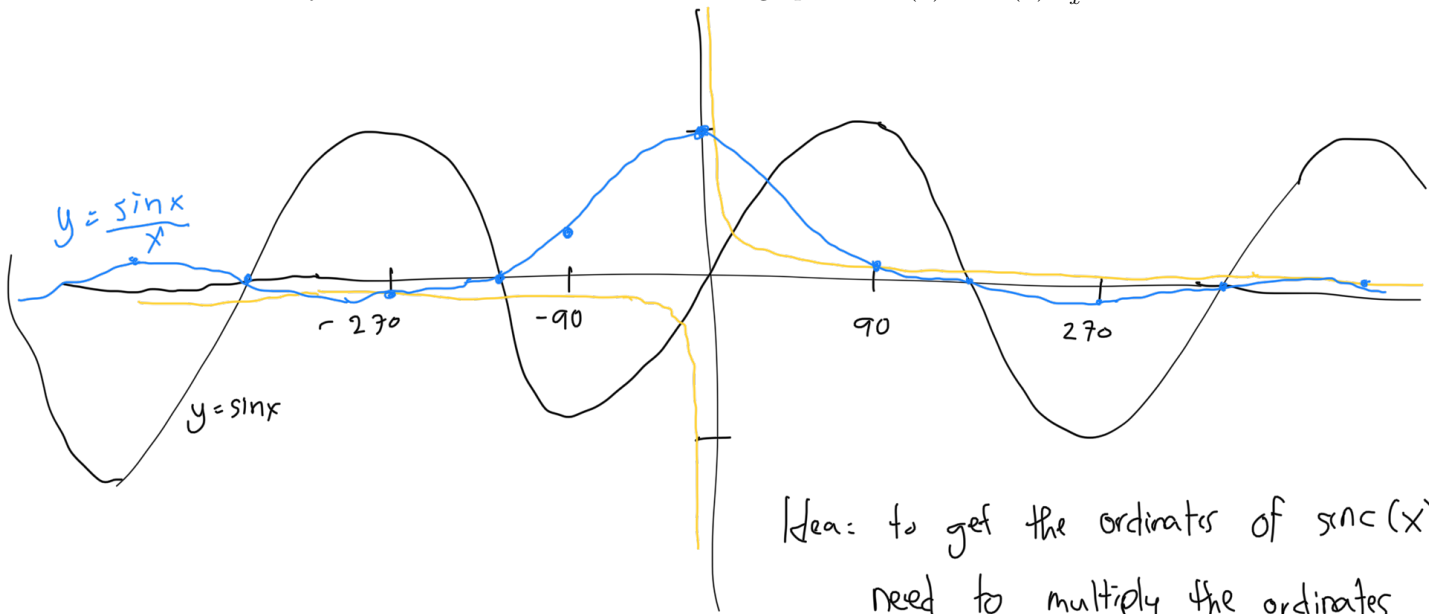
## The Function $\text{sinc}(x)$

The *unnormalized sinc function* is defined to be:

$$\text{sinc}(x) = \frac{\sin x}{x}.$$

This function is used in signal processing, a field which includes sound recording and radio transmission.

Use your understanding of the graphs of  $\sin(x)$  and  $\frac{1}{x}$  together with what you learned in this lecture to sketch a graph of  $\text{sinc}(x) = \sin(x) \cdot \frac{1}{x}$ .



Idea: to get the ordinates of  $\text{sinc}(x)$ , you need to multiply the ordinates of its component functions ( $\sin x$  &  $\frac{1}{x}$ ).

Note: I need to watch a video

about multiplying functions graphically to answer this.

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