

Assignments for the week of Sept. 12:

- 45 minutes of Khan Academy
- Read 5.7 and "Trig Guide to Graphing" on brewermath.com
- Due Fri. 16 Sept:
5.7 #1-50 all; #53-64 all; 87-92 all
Ch 5 Review (pages 467-468) #1-27odd;53,55
- Test #2 - This Friday, 9/16

Summary:

For a Trigonometric function of the form $y = af \left[b \left(x + \frac{c}{b} \right) \right] + d$,

Amplitude = $|a|$ (note that amplitude is always positive)

Period = $\frac{\text{original period of the function } (\pi \text{ or } 2\pi)}{|b|}$

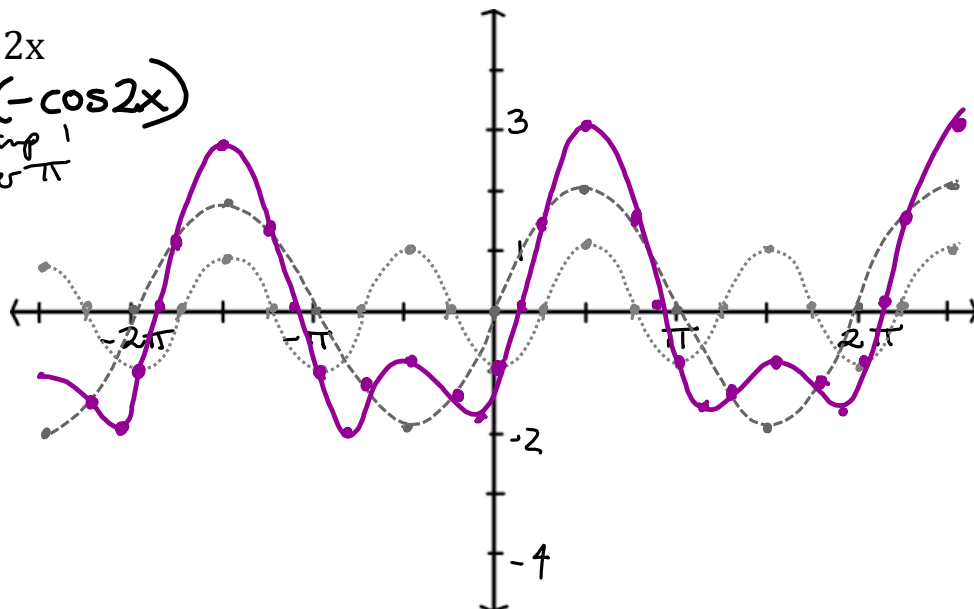
Horizontal shift = $\frac{c}{b}$, left if $\frac{c}{b} > 0$
right if $\frac{c}{b} < 0$

Vertical shift = d , up if $d > 0$
down if $d < 0$

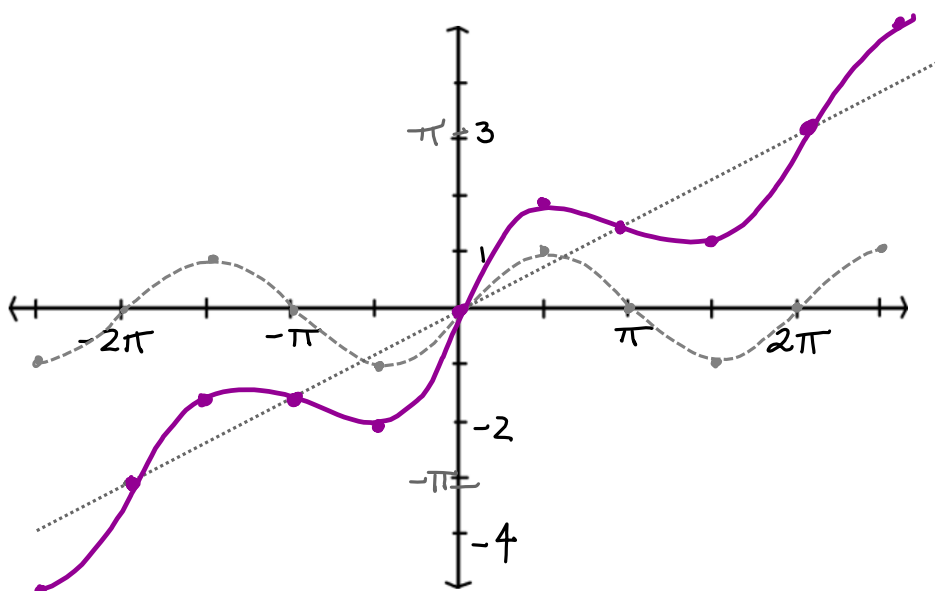
$$y = 2\sin x - \cos 2x$$

$$= 2\sin x + (-\cos 2x)$$

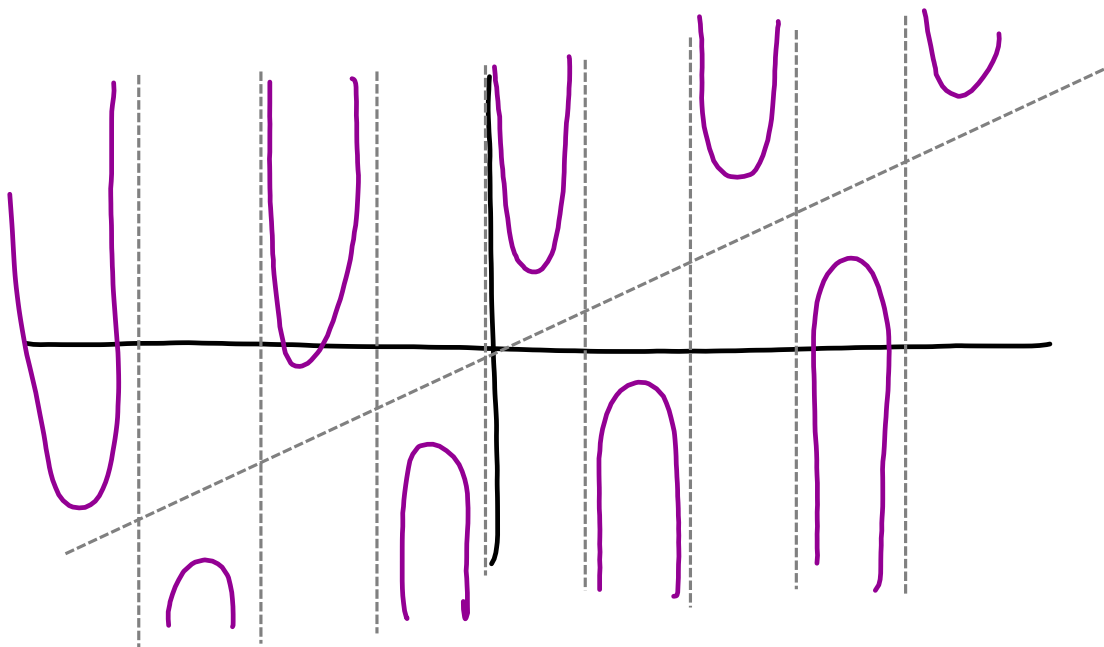
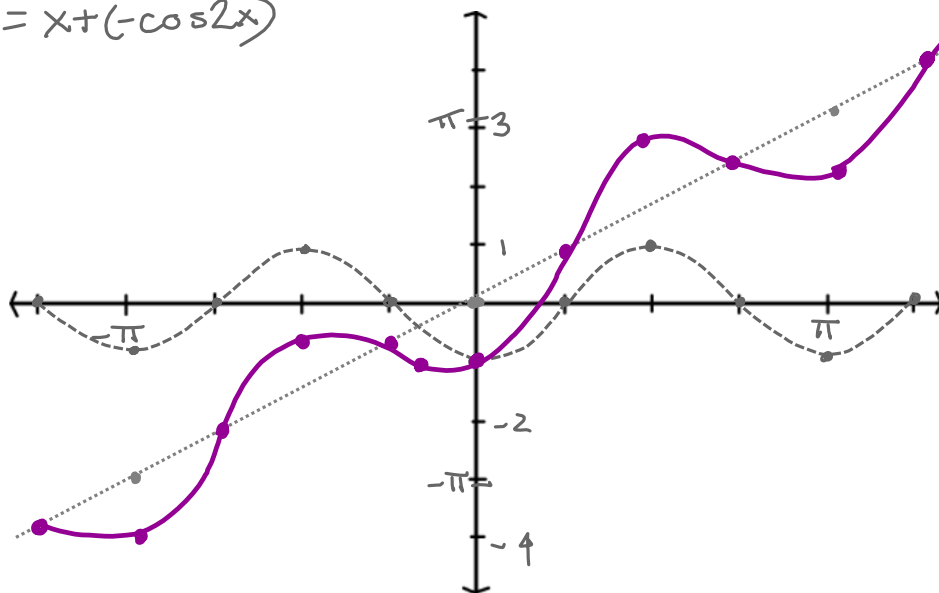
amp 2 per 2π amp 1 per π



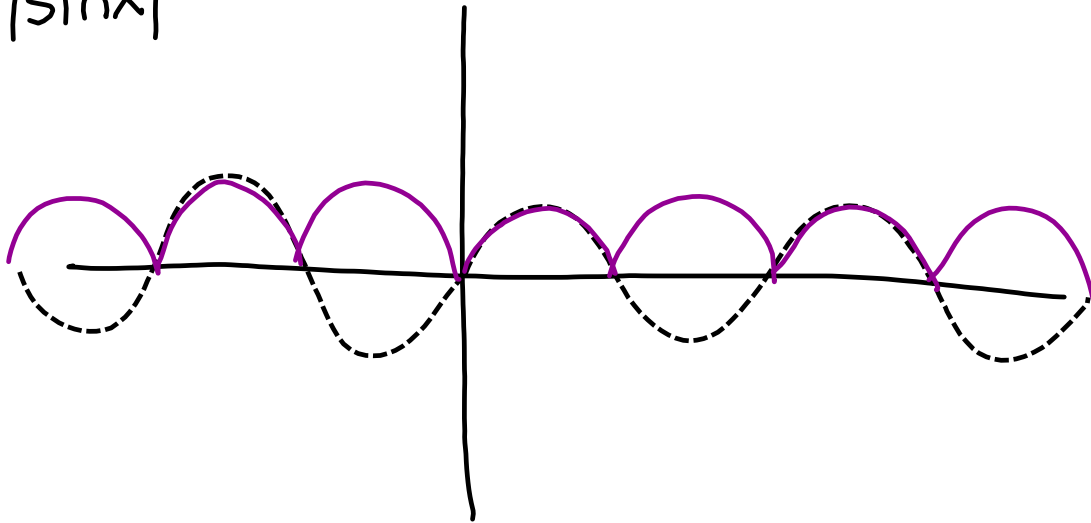
$$y = \sin x + \frac{1}{2}x$$



$$y = x - \underset{\text{per } \pi}{\cos 2x} = x + (-\cos 2x)$$



$$|\sin x|$$



$$|\sin x + \frac{1}{2}|$$

