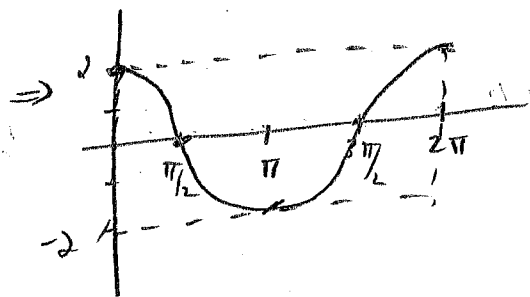


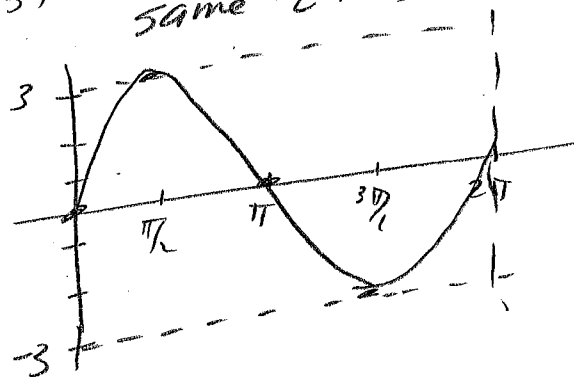
#7 E #8 D #9 B #10 A #11 F #12 C

⊗ Something to Notice: OBSERVE How the vertical and horizontal scales on several of those graphs - particularly C & F - are mis-leading. It makes it more challenging to determine the differences between them. That is (part of) the reason I want your graphs to have a better approximation of the scales on the axes.

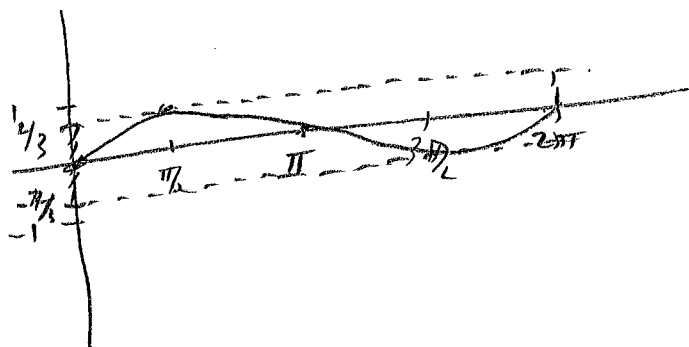
#13  $y = 2 \cos(x)$  BASIC SHAPES  
 $\Rightarrow \text{amp} = |2| = 2$   
 shift: none  
 standard interval is the same  $[0, 2\pi]$



#14  $y = 3 \sin(x)$  BASIC SHAPES  
 $\text{amp} = |3| = 3$   
 shift: none  
 standard interval: same  $\Rightarrow [0, 2\pi]$



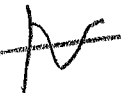
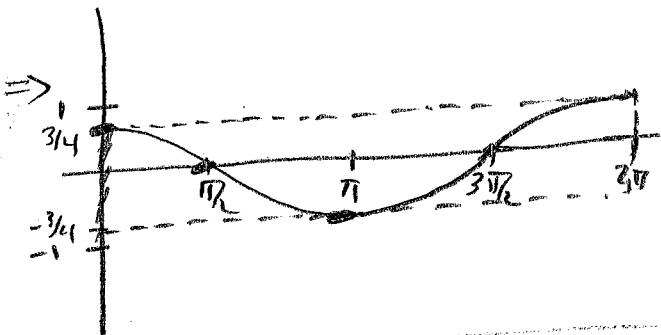
#15  $y = \frac{2}{3} \sin(x)$  BASIC SHAPES  
 $\text{amp} = |\frac{2}{3}| = \frac{2}{3}$   
 shift: none  
 standard interval  $\Rightarrow \text{SAME} \Rightarrow [0, 2\pi]$



#16  $y = \frac{3}{4} \cos(x)$

amp:  $|\frac{3}{4}| = \frac{3}{4}$   
 shift: none  
 standard interval  $[0, 2\pi]$

BASIC  
SHAPE

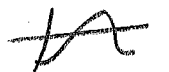
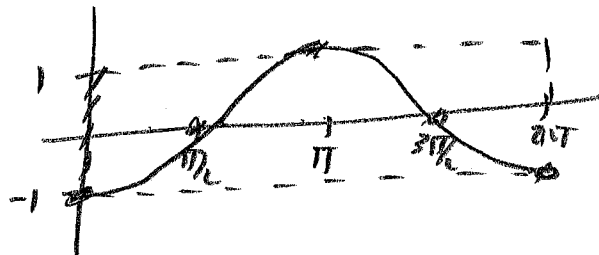



#17

$y = -\cos(x)$

amp:  $|-1| = 1$   
 shift: none  
 standard interval  $[0, 2\pi]$

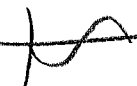
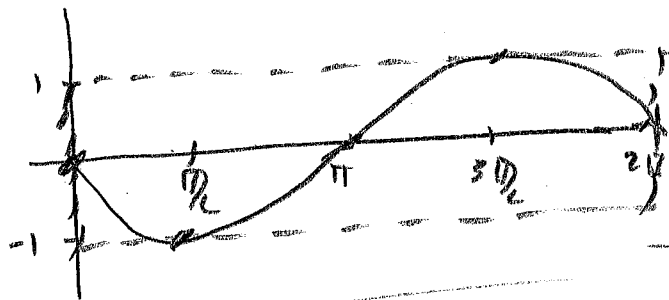
BASIC  
SHAPE

#18  $y = -\sin(x)$

amp:  $|-1| = 1$   
 shift: none  
 standard interval  $[0, 2\pi]$

BASIC  
SHAPE

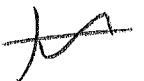
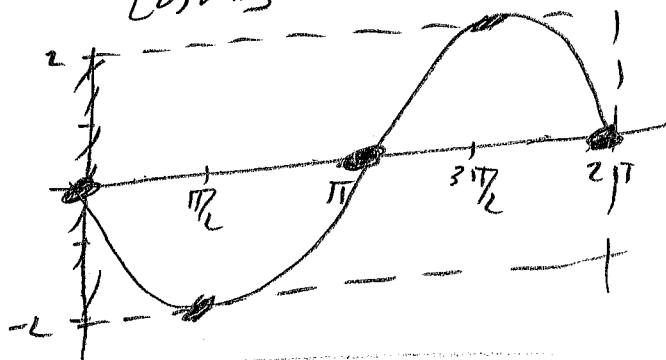



#19

$y = -2\sin(x)$

amp:  $|-2| = 2$   
 shift: none  
 standard interval  $[0, 2\pi]$

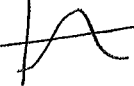
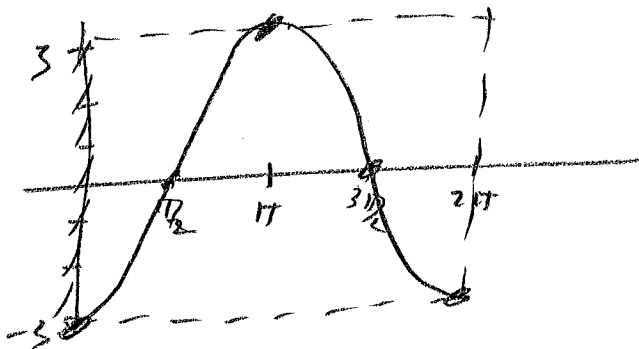
BASIC  
SHAPE

#20  $y = -3\cos(x)$

amp:  $|-3| = 3$   
 shift: none  
 standard interval  $[0, 2\pi]$

BASIC  
SHAPE

#23  $y = \sin\left(\frac{1}{2}x\right)$  BASIC SHAPES

amp:  $|1| = 1$

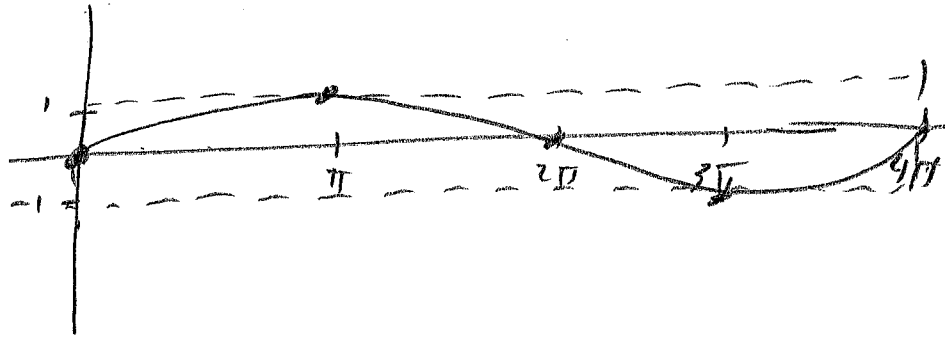
shift: none

standard interval:

$$0 \leq \frac{1}{2}x \leq 2\pi$$

$$\Rightarrow 2(0 \leq \frac{1}{2}x \leq 2\pi)$$

$$\Rightarrow 0 \leq x \leq 4\pi$$



#27  $y = \sin(3x)$  Basic shape

amp:  $|1| = 1$

shift: none

standard interval

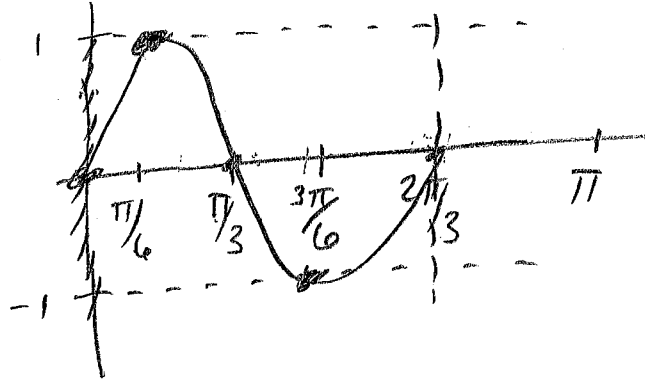
$$0 \leq 3x \leq 2\pi$$

$$\Rightarrow \frac{1}{3}(0 \leq 3x \leq 2\pi)$$

$$\Rightarrow 0 \leq x \leq \frac{2}{3}\pi$$

(ugh!)

↳ I will avoid asking you this type



#28  $y = \cos(2x)$  BASIC SHAPES

amp:  $|1| = 1$

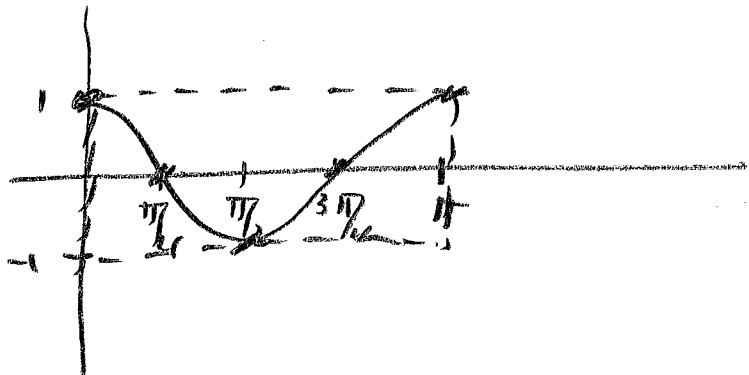
shift: none

standard interval

$$0 \leq 2x \leq 2\pi$$

$$\Rightarrow \frac{1}{2}(0 \leq 2x \leq 2\pi)$$

$$\Rightarrow 0 \leq x \leq \pi$$



#29  $y = 2\sin(\frac{1}{4}x)$

amp:  $|2| = 2$

shift: none

Basic shape:

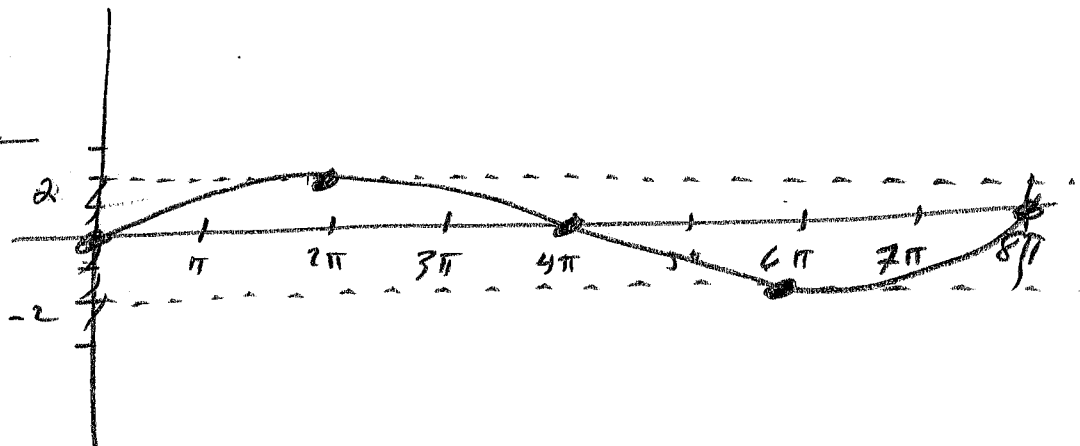
standard Interval

$$0 \leq \frac{1}{4}x \leq 2\pi \Rightarrow$$

$$\Rightarrow 4(0 \leq \frac{1}{4}x \leq 2\pi)$$

$$\Rightarrow 0 \leq x \leq 8\pi$$

Wow!



#32  $y = -5\cos(2x)$

amp:  $|-5| = 5$

shift: none

Basic shape

standard Interval

$$0 \leq 2x \leq 2\pi$$

$$\Rightarrow 0 \leq x \leq \pi$$

