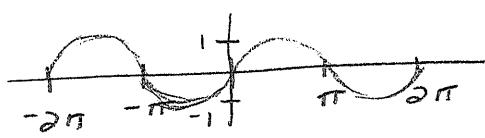


Trig

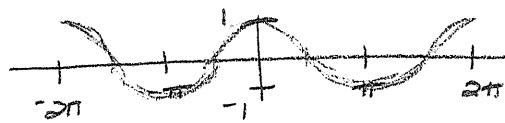
CH. 3 Review

p. 207 1-9, (15-30) m3, 41-48

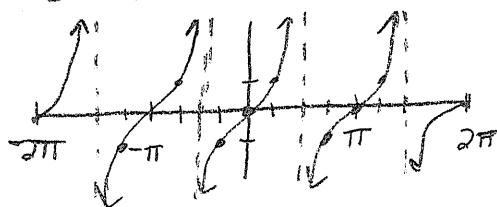
$$\textcircled{1} \quad y = \sin x$$



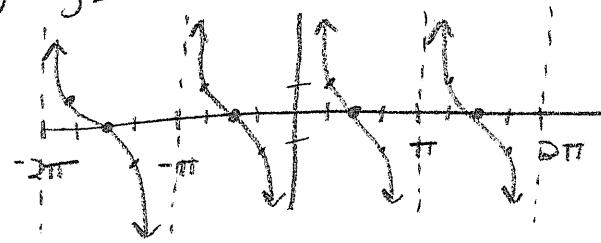
$$\textcircled{2} \quad y = \cos x$$



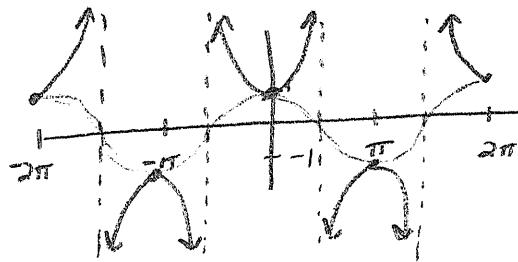
$$\textcircled{3} \quad y = \tan x$$



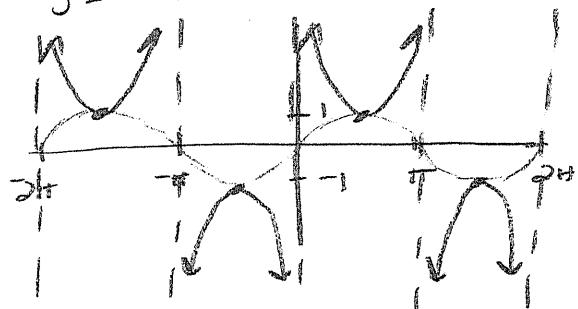
$$\textcircled{4} \quad y = \cot x$$



$$\textcircled{5} \quad y = \sec x$$

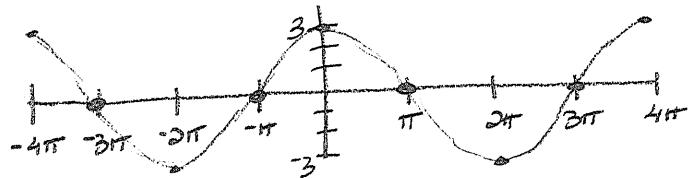


$$\textcircled{6} \quad y = \csc x$$



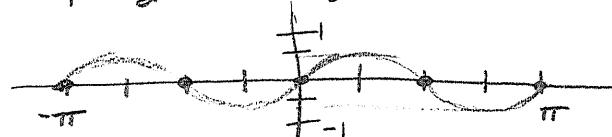
$$\textcircled{7} \quad y = 3 \cos \frac{x}{2} \quad -4\pi \leq x \leq 4\pi$$

$$\text{Amp} = 3 \quad P = \frac{2\pi}{\frac{1}{2}} = 4\pi$$



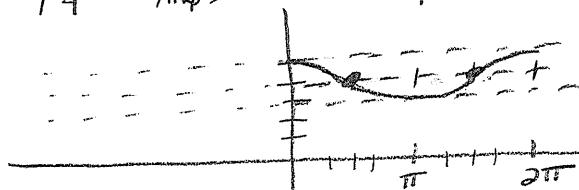
$$\textcircled{8} \quad y = \frac{1}{2} \sin 2x \quad -\pi \leq x \leq \pi$$

$$\text{Amp} = \frac{1}{2} \quad P = \frac{2\pi}{2} = \pi$$



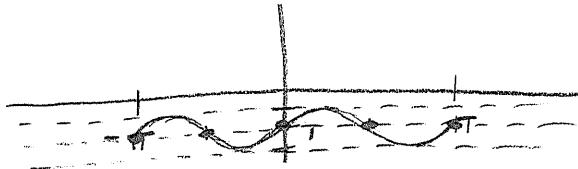
$$\textcircled{9} \quad y = 4 + \cos x \quad 0 \leq x \leq 2\pi$$

$$\text{Amp} = 1 \quad P = \frac{2\pi}{1} = 2\pi$$



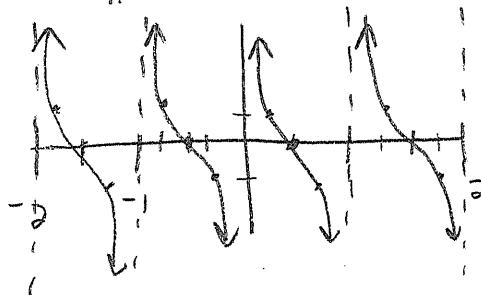
$$\textcircled{10} \quad y = -1 + \frac{1}{2} \sin 2x \quad -\pi \leq x \leq \pi$$

$$\text{Amp} = \frac{1}{2} \quad P = \frac{2\pi}{2} = \pi$$



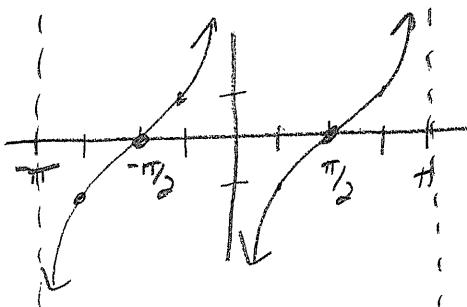
$$\textcircled{11} \quad y = \cot \pi x \quad -2 \leq x \leq 2$$

$$P = \frac{\pi}{1} = \pi$$



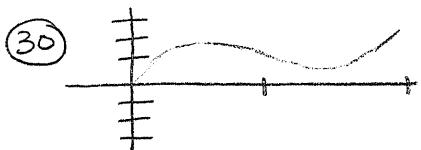
$$\textcircled{12} \quad y = \tan \left(x + \frac{\pi}{2} \right) \quad -\pi < x < \pi$$

$$P = \frac{\pi}{1} = \pi \quad \text{P.S.} = -\frac{\pi}{2}$$



Trig Ch. 3 Rec. p. 2

(24) $y = -3 \cos(\pi x + \pi)$
 Amp = 3 P = $\frac{2\pi}{\pi} = 2$ P.S. = $-\frac{\pi}{\pi} = -1$



(46) $y = 0.05 \cos Bt$

A) $P = \frac{1}{280}$

$B \left(\frac{1}{280} \right) = \left(\frac{2\pi}{B} \right) B$

$280 \left(\frac{B}{280} \right) = (2\pi) 280$

$B = 560\pi$

B) $f = \frac{1}{0.0025 \text{ sec}} = 400 \text{ Hz} = f$

$P = \frac{2\pi}{B}$

$B(0,0025) = \left(\frac{2\pi}{B} \right) B$

$\frac{0,0025 B}{0,0025} = \frac{2\pi}{0,0025}$

$B = 800\pi$

c) $P = \frac{2\pi}{350\pi}$

$P = \frac{1}{350}$

$f = 350 \text{ Hz}$

(27) $y = 3 + 4 \sin\left(\frac{\pi}{2}x\right)$
 $B(4) = \left(\frac{2\pi}{B} \right) B$
 $\frac{4B}{4} = \frac{2\pi}{4} \quad B = \frac{\pi}{2}$

(47) $y = 18 \cos(60\pi t)$

$P = \frac{1}{f} = \frac{1}{30}$

$B \left(\frac{1}{30} \right) = \left(\frac{2\pi}{B} \right) B$

$30 \left(\frac{B}{30} \right) = (2\pi) 30$

$B = 60\pi$

(48) $y = 6 \cos \frac{\pi}{10}(t - s) \rightarrow y = 6 \cos\left(\frac{\pi}{10}t - \frac{\pi}{2}\right)$

Amp = 6 P = $\frac{2\pi}{\frac{\pi}{10}} \cdot \frac{10}{\pi} = 20$

P.S. = $\frac{\frac{\pi}{2} \cdot \frac{10}{\pi}}{\frac{\pi}{10}} = 5$ (Start)
 (End) $5 + 20 = 25$

