Trig. Curves
Review for Test

Name: _____

I) State the exact values for the amplitude, period, phase shift, and vertical shift.

① $y = 2\sin(2\theta - \frac{\pi}{2}) + 1$

② $y = -3\cos(\theta + \pi) - 4$

③ $y = 3\tan(2\theta)$

④ $y = 2\cot(3\theta - \pi/4) - 2$

⑤ $y = -3\sec(\frac{1}{2}\theta) + 2$

II) Graph.

⑥ $y = -\sin(2\theta) - 3$

⑦ $y = 2\cos(\theta + \pi/4)$

⑧ $y = \tan(2\theta - \pi/2)$

⑨ $y = 3\sec(2\theta + \pi)$

⑩ $y = -4\cos(\frac{1}{2}\theta) + 2$

III) Write the equation of the sine function given the following information.

⑪ amp = 2 period = π p.s. = 0 v.s. = 1

⑫ amp = 1 period = 4π p.s. = $\pi/3$ v.s. = 0

⑬ amp = $1/2$ period = $\frac{\pi}{2}$ p.s. = $-\pi/6$ v.s. = -3

IV) Find the values of each of the following. Remember Principal Values.

⑭ $\theta = \sin^{-1}\left(-\frac{\sqrt{2}}{2}\right)$ ⑮ $\theta = \mathrm{Tan}^{-1}(-1)$

⑯ $\theta = \arctan(\sqrt{3})$ ⑰ $\theta = \cos^{-1}(1/2)$

⑱ $\theta = \cos(\arcsin(-1))$ ⑲ $\theta = \sin(\mathrm{Arcsin}\,0 - \cos^{-1}0)$

⑳ $\theta = \arctan(\sqrt{3}/3)$ ㉑ $\tan(\cos^{-1}\frac{\sqrt{2}}{2}) - \cos(\sin^{-1}1)$

V) Write the equations for the following graphs.

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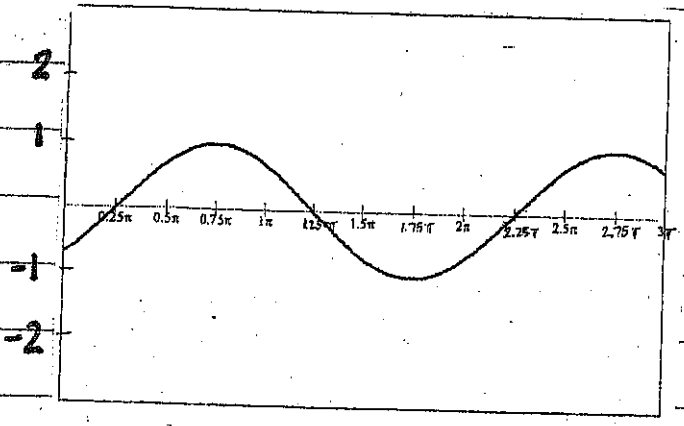

a= _____ b= _____

c= _____ d= _____

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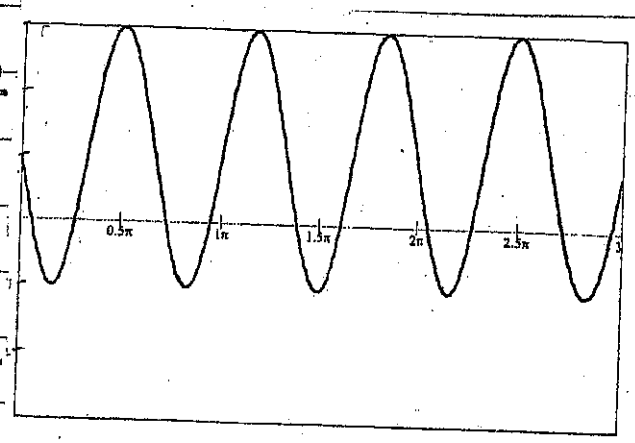

a= _____ b= _____

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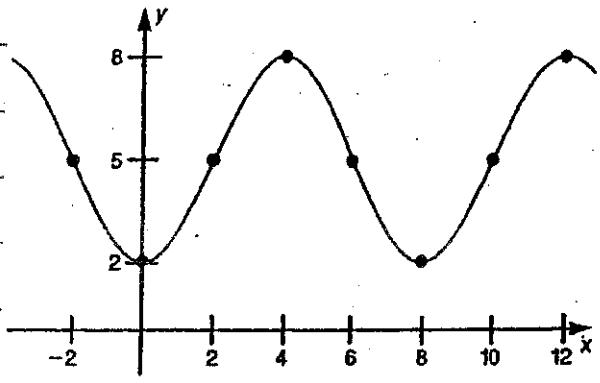

a= _____ b= _____

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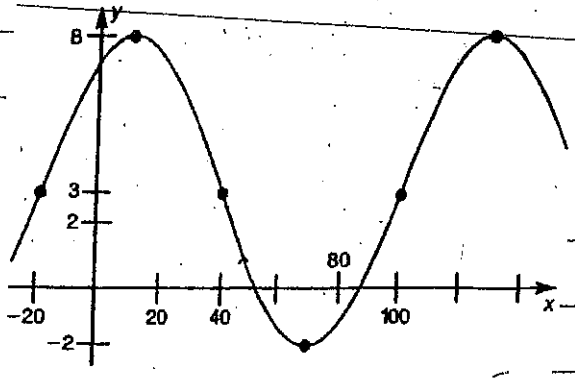

a= _____ b= _____

c= _____ d= _____