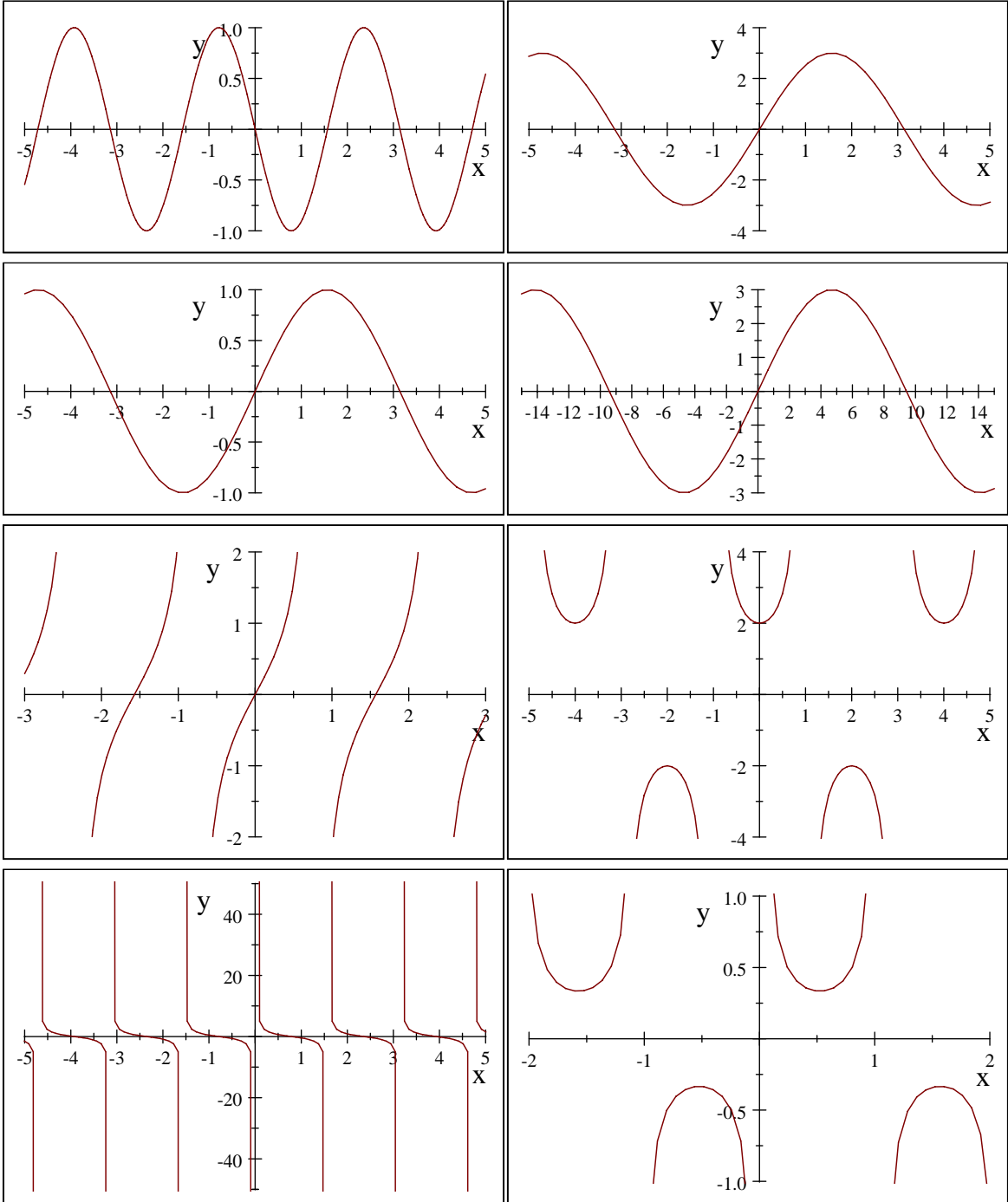


MATH. 125, QUIZ 6 - Section 4.5 & 4.6 (25points = 5% final grade) -
NO CALCULATOR ALLOWED

1. (1 point each) **Match the given functions (a) - (h) with the graphs; indicate your choice by writing an appropriate letter below each graph**

- (a) $y = 3 \sin x$ (b) $y = \sin(-2x)$ (c) $y = \cos(x + \frac{\pi}{2})$ (d) $y = 3 \sin(\frac{x}{3})$
 (e) $y = \tan 2x$ (f) $y = \cot(2x)$ (g) $y = 2 \sec x$ (h) $y = \frac{\csc(3x)}{3}$



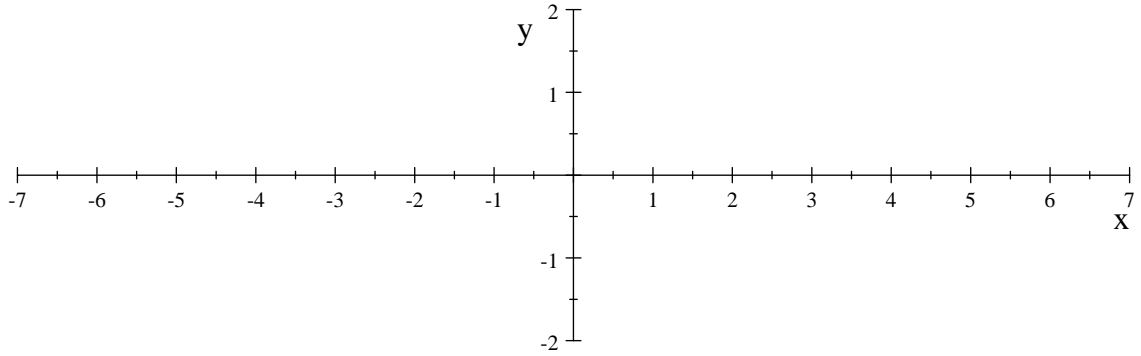
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2. (2 points each) Determine the amplitude and the period of the following functions.

(a) For $y = -5 \sin 2x$ the amplitude is equal to _____ and the period is equal to _____

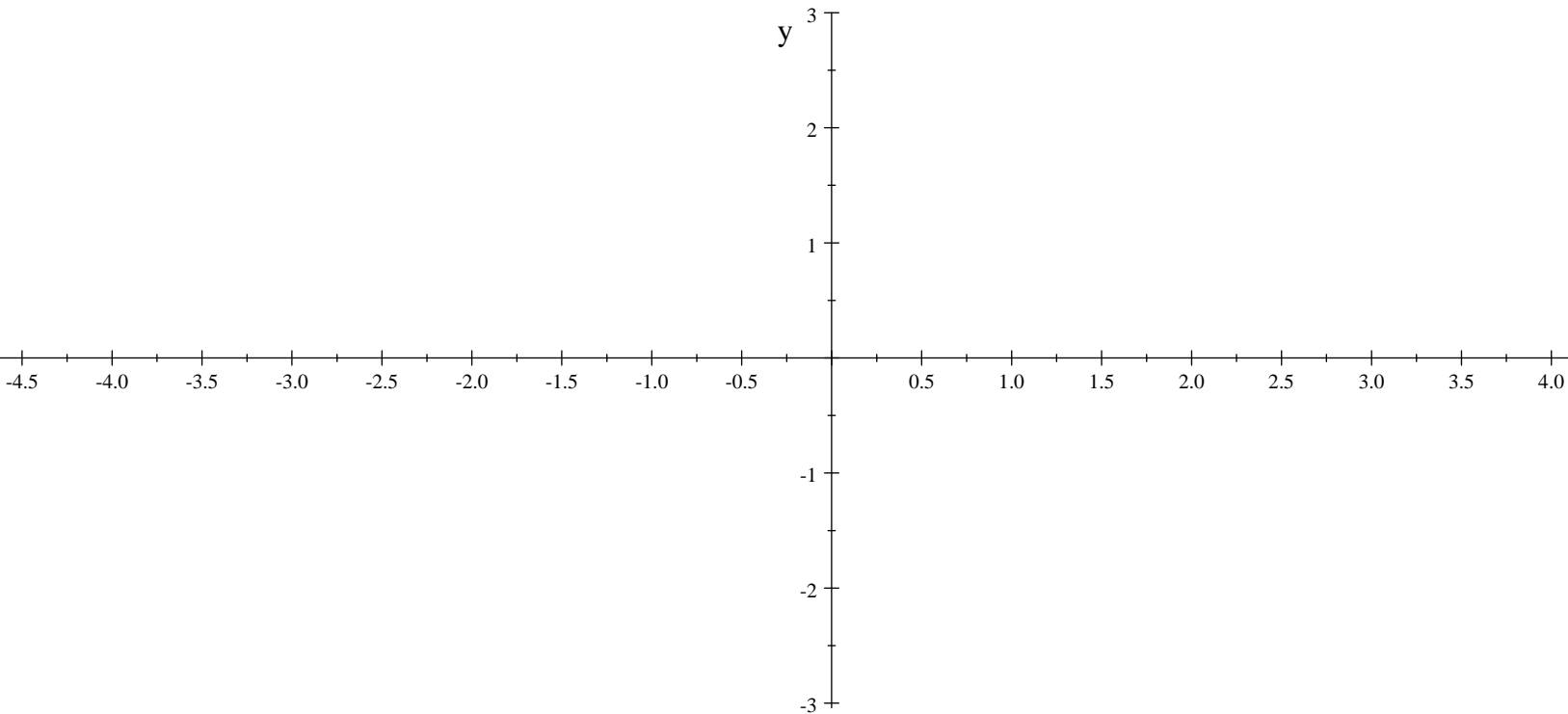
(b) For $y = -2 \cos \left(\frac{x}{4}\right)$ the amplitude is equal to _____ and the period is equal to _____

3. (8 points) **Graph the following function: $y = 2 \sin \left(x + \frac{\pi}{4}\right)$ at least from $x = -2\pi$ to $x = 2\pi$ (Remark: you do not have the points $\pm 2\pi$ marked on the x -line below but you know an approximate value of π so you know where these points should be located on that line). List below the graph all of the important points as indicated**



x-intercepts in this range are: _____; y-intercept: _____; max = _____; min = _____

4. (7 points) **Graph the following function: $y = \tan \left(x - \frac{\pi}{4}\right)$ at least from $x = -\pi$ to $x = \pi$ (Remark: you do not have the points $\pm 2\pi$ marked on the x -line below but you know an approximate value of π so you know where these points should be located on that line). List below the graph all of the important points as indicated**



x-intercepts in this range are: _____; y-intercept: _____.