King Fahd University of Petroleum and Minerals
Diploma Math Program
Math 004 - Term 033
Quiz#2 A (4.5 - 4.6)

Name: **ID:** **Sec.:**

Show all steps for full credit

Question1:

For the function $y = -2\sec(\frac{\pi}{2}x + \pi) + 1$

a) Complete the following table (write the rule when that necessary). **(4 pts)**

the period	the amplitude	the phase shift	the range

b) Graph the function over one complete period **(4 pts)**

Question2: **(4 pts)**

Consider the function $f(x) = -\frac{3}{2}\cot(2x - \frac{\pi}{4})$

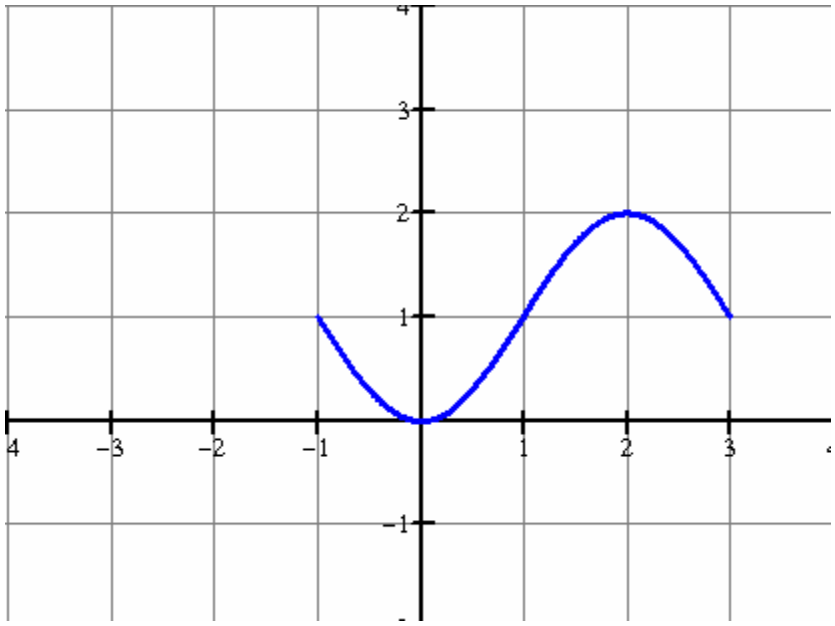
a) Find the period of $f(x)$ **(1 pt)**

b) Find the equation of all vertical asymptotes over the interval $[-\pi, \pi]$. **(3 pts)**

c) Find the $x-$intercepts over the interval $[-\pi, \pi]$. **(3 pts)**

Question3: **(4 pts)**

The graph given below represents the graph of a sine function of the form $y = a\cos(bx + c) + d$. Find the values of $a, b, c,$ and d.



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