Math 49B (8:30am – 9:20am)
Midterm 1
Thu Oct 16, 2008

SCORE: ___ / 120 POINTS

What day of the month is your birthday ? ___ ___
What are the last 2 digits of your address ? ___ ___
What are the last 2 digits of your zip code ? ___ ___
What are the last 2 digits of your social security number ? ___ ___
[IF YOU DO NOT HAVE A SOCIAL SECURITY NUMBER, USE YOUR STUDENT ID NUMBER]

CALCULATOR NOT ALLOWED ON THIS SECTION

Sketch the graph of $y = -3\cos(2\pi x - \pi) + 4$. Include 2 periods. Label all x- and y-coordinates discussed in class.

SCORE: ___ / 12 POINTS

PERIOD = $\frac{2\pi}{2\pi} = 1$

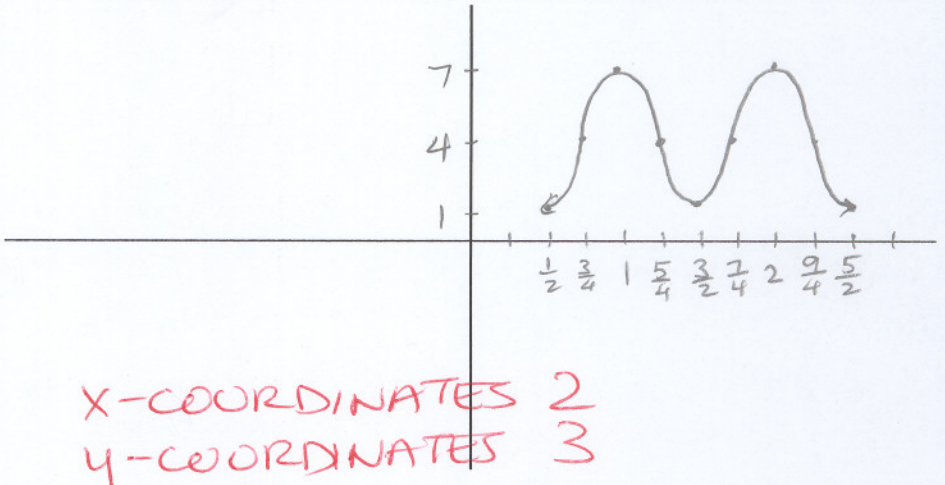
$\frac{1}{4}$ PERIOD = $\frac{1}{4}$

AMPLITUDE = 3

MIDLINE = 4

START = $-\frac{-\pi}{2\pi} = \frac{1}{2}$

DIRECTION 



COS GRAPH 3
UPSIDE DOWN 2
START POINT 2

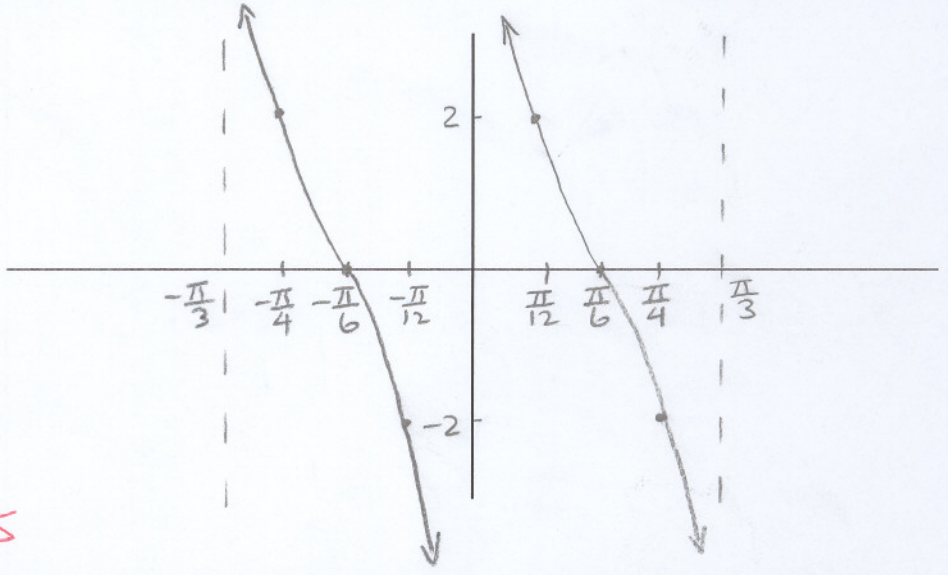
X-COORDINATES 2
y-COORDINATES 3

Sketch the graph of $y = 2\cot 3x$. Include 2 periods. Label all x- and y- coordinates discussed in class.

SCORE: ___ / 8 POINTS

PERIOD = $\frac{\pi}{3}$

$\frac{1}{4}$ PERIOD = $\frac{\pi}{12}$



cot GRAPH 3
ASYMPTOTES 2
X-COORDINATES 2
y-COORDINATES 1 AT CORRECT X-COORDINATES

Write $\frac{\sin 72°}{1 + \cos 72°}$ as the sine, cosine or tangent of an angle.

SCORE: ___ / 4 POINTS

tan $\frac{1}{2}(72°)$ = tan 36°

$1\frac{1}{2}$ $1\frac{1}{2}$ 1