

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? _____

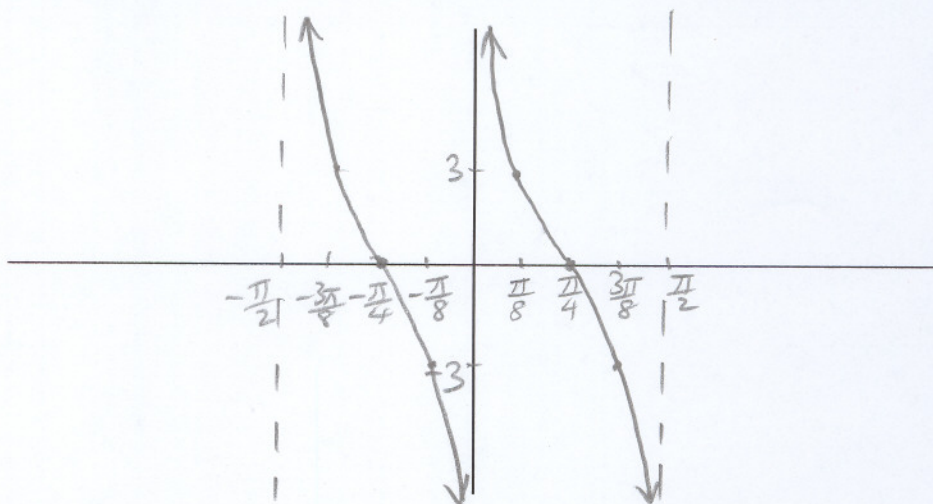
[IF YOU DO NOT HAVE A SOCIAL SECURITY NUMBER,
USE YOUR STUDENT ID NUMBER]**CALCULATOR NOT ALLOWED ON THIS SECTION**Sketch the graph of $y = 3 \cot 2x$. Include 2 periods. Label all x- and y- coordinates discussed in class.

SCORE: ___ / 8 POINTS

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

$$\frac{1}{4} \text{ PERIOD} = \frac{\pi}{8}$$

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

Sketch the graph of $y = -4 \cos(3\pi x + \pi) + 3$. Include 2 periods.

SCORE: ___ / 12 POINTS

Label all x- and y- coordinates discussed in class.

$$\text{PERIOD} = \frac{2\pi}{3\pi} = \frac{2}{3}$$

$$\frac{1}{4} \text{ PERIOD} = \frac{1}{6}$$

$$\text{AMPLITUDE} = 4$$

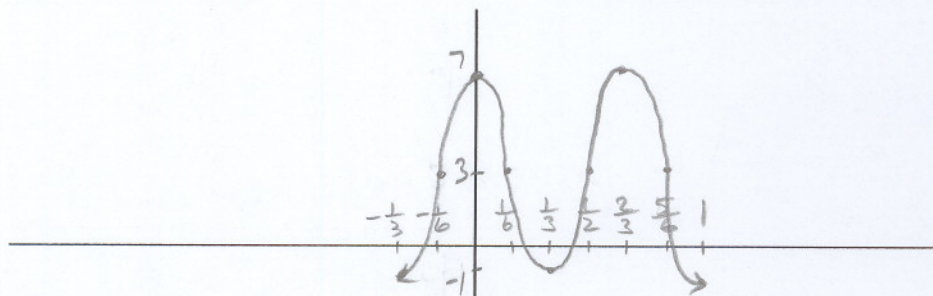
$$\text{MIDLINE} = 3$$

$$\text{START} = -\frac{\pi}{3\pi} = -\frac{1}{3}$$

DIRECTION

COS GRAPH 3
 UPSIDE DOWN 2
 START POINT 2

X-COORDINATES 2
 y-COORDINATES 3

Write $\frac{\sin 144^\circ}{1 + \cos 144^\circ}$ as the sine, cosine or tangent of an angle.

SCORE: ___ / 4 POINTS

$$\tan \frac{1}{2} (144^\circ) = \tan 72^\circ$$

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