## ${\bf Trigonometric\ equations\ -\ Worksheet}$

NAME: DATE:

1. Find all the solutions of the equation

(a) 
$$\cot x = -3.5$$

(b) 
$$-2\sec x = 4$$

2. Approximate all the solutions in  $[0, 2\Pi)$  of  $\cos x = 0.958$ 

- 3. Find the **exact** solution(s) for  $2 \sin x 1 = 0$ :
  - (a) In the interval  $[0, 2\Pi)$ .
  - (b) In the interval  $(-\infty, +\infty)$

4. Find all  $\theta$  with  $0^{\circ} \leq \theta < 360^{\circ}$  that are solutions to  $4\sin^2\theta + 4\sin\theta - 3 = 0$ 

5. Solve the equation graphically  $5 \sin 3x + 6 \cos 3x = 1$