

Name \_\_\_\_\_

- You have 15 minutes
- No calculators
- Show sufficient work

1. (1 point) Evaluate the quantity  $\sec(-7\pi/6)$ .

2. (3 points) Given an acute angle  $\theta$  for which  $\sin \theta = 3/5$ , evaluate the following quantity.

$$\sin(\theta) + \sin\left(\frac{\pi}{2} - \theta\right) + \sin(\pi - \theta)$$

3. (3 points) Suppose that  $f(x)$  is an odd function,  $g(x)$  is an even function,  $f(5) = 3$  and  $g(4) = -5$ . What is the value of  $(f \circ g)(-4)$ .

4. (3 points) Determine the domain of the given function.

$$f(x) = \frac{x^2 - 1}{3\sqrt{2} - \sqrt{50 - 2x^2}}$$