

Name \_\_\_\_\_

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

1. (3 points) Given an acute angle  $\theta$  for which  $\sin(\theta) = \frac{1}{3}$ , evaluate the following quantities.

(a)  $\sec(\theta)$

(b)  $\sin(-\theta)$

(c)  $\cos(\pi - \theta)$

2. (4 points) Determine the domain of the given function.

$$f(x) = \frac{\sin(x^2 - 4)}{\sqrt{102} - \sqrt{200 - 2x^2}}$$

3. (3 points) Determine whether the following function is even, odd or neither. Give a very clear justification for your answer.

$$w(t) = t^5 \sin(t^3)$$