Name ________________________________

- No calculators allowed.
- Show sufficient work to justify each answer.
- You have 15 minutes for this quiz.

1. (2 points) Is the following function even, odd or neither?

\[ g(x) = \left(3x^2 + \cos^5 x\right)^7 \]

2. (2 points) What is the domain of the function \( f(x) = \sqrt{5 - \sqrt{2x - 1}} \) ?
3. (2 points each) Evaluate the following quantities.

(a) \( \cot \left( -\frac{2\pi}{3} \right) \)

(b) \( \tan^2 \left( \frac{\pi}{7} \right) - \sec^2 \left( \frac{\pi}{7} \right) \)

4. (2 points) Given an acute angle \( \theta \) for which \( \sin \theta = \frac{4}{5} \), evaluate \( \sin \left( \theta - \frac{\pi}{2} \right) \).