

Name _____

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

1. (3 points) Suppose that $f(x) = 1 + \sqrt{3x - 2}$ and $g(x) = 4 + \sqrt{10 - 2x}$. What is the domain of the composite function $(g \circ f)(x)$?

2. (1 point) Evaluate the quantity $\csc(-\pi/6)$.

3. (3 points) Given an acute angle θ for which $\cos \theta = 1/3$, evaluate the following product.

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

4. (3 points) The graph of $y = f(x)$ is given. Draw the graph of $y = 3 - f(x + 2)$.

