

# 1.12 Confirming Continuity Over an Interval

Calculus

Name: \_\_\_\_\_

**CA #1**

**Find the domain of each function.**

1.  $g(t) = \sqrt{6 - 2t}$

2.  $f(x) = \ln(3x - 1) + 4$

3.  $v(t) = \frac{2}{t^2 + 4}$

4.  $g(w) = \frac{7}{5 - \sqrt{w}}$

5.  $v(t) = \frac{2t}{t\sqrt{t+6}}$

6.  $g(x) = \ln\left(\frac{2}{4x-5}\right)$

7.  $h(x) = \frac{\sqrt{x-13}}{x+7}$

|                            |                      |                     |                               |
|----------------------------|----------------------|---------------------|-------------------------------|
| 1. $t \leq 3$              | 2. $x > \frac{3}{4}$ | 3. All real numbers | 4. $w \geq 0$ and $w \neq 25$ |
| 5. $t > -6$ and $t \neq 0$ | 6. $x > \frac{4}{5}$ | 7. $x \geq 13$      |                               |