

# 1.10 Types of Discontinuities

Calculus

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

**CA #2**

**For each function identify the type of each discontinuity and where it is located.**

<p>1. <math>f(x) = \frac{x+3}{x^2+4x+3}</math></p>	<p>2. <math>f(x) = \frac{x^2}{7x-49}</math></p>	<p>3. <math>f(x) = \sin x</math> for <math>0 \leq x \leq 2\pi</math></p>
<p>4. <math>f(x) = \frac{x-2}{x^2-7x+10}</math></p>	<p>5. <math>f(x) = \frac{x^2-8x+7}{x-7}</math></p>	<p>6. <math>f(x) = \sec \frac{x}{2}</math> for <math>0 \leq x \leq 2\pi</math></p>

1.	Hole at $x = -3$ V.A. at $x = -1$
2.	V.A. at $x = 7$
3.	Continuous function.
4.	Hole at $x = 2$ V.A. at $x = 5$
5.	Hole at $x = 7$
6.	V.A. at $x = \pi$