1.4 Finding Limits from Tables

Calculus Name: _____ **CA #1**

Use the table for each problem to evaluate the limit.

1. $\lim_{x\to -4} f(x) =$

x	-4.1	-4.001	-3.999	-3.9
$f(x)$	1.8	1.999	2.001	2.2

2. $\lim_{x\to 6} f(x) =$

x	5.95	5.99	6.01	6.1
$f(x)$	-2.7	-2.501	-2.499	-2.2

For each function, create your own table of values to evaluate the limit.

3. $f(x) = \frac{x^2-5x-14}{x-7}$

x					
$f(x)$					

$\lim_{x\to 7} f(x) =$

4. $f(x) = \frac{6x^3-7x^2-14x+15}{x-1}$

x					
$f(x)$					

$\lim_{x\to 1} f(x) =$

Use the information given for each problem to evaluate the limit.

5. The function f is continuous and increasing $x \geq -8$. The table gives values of f at selected values of x.

x	-6.2	-6.001	-5.999	-5.8
$f(x)$	-1.8	-1.501	-1.499	-1.4

Approximate the value of $\lim_{x\to -6} \sec(f(x))$.

6. The function f is continuous and decreasing for $x \geq -5$. The table gives values of f at selected values of x.

x	-2.3	-2.001	-1.999	-1.9
$f(x)$	9.5	9.001	8.999	8.6

Approximate the value of $\lim_{x\to -2} \sqrt[4]{f(x)}$.

Answers to 1.4 CA #1

1. 2	2. -2.5	3. 9	4. -10	5. 14.1368	6. 1.732