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Using direct substitution $\lim_{x \rightarrow c} \frac{f(x)}{g(x)} = \frac{0}{0}$ Undefined
 Using L'Hopital's rule

Using direct substitution again $\lim_{x \rightarrow c} \frac{f(x)}{g(x)} = \frac{a+1}{b} = \frac{a}{b}$
 i.e. The L.H.S. $\frac{a+1}{b} = \frac{a}{b}$

$f(x) = 5x - 2$ $g(x) = x^2 - 2$ $\Delta x = 0.01$ $x = 6$

L.E	$a + \Delta x$	a	$a + \Delta x$	L+e
8.50	6.70	6	6.10	9.00
8.55	6.75	6	6.02	9.10
8.60	6.80	6	6.03	9.15
8.65	6.85	6	6.04	9.20
8.70	6.90	6	6.05	9.25
8.75	6.95	6	6.06	9.30
8.80	7.00	6	6.07	9.35
8.85	7.05	6	6.08	9.40
8.90	7.10	6	6.09	9.45
8.95	7.15	6	6.01	9.05
9.00	7.20	6	6.00	9.00

$f(x) = 5x - 2$ $F(6) = 5 \times 6 - 2$
 $28 \times x < 6$

