Definition 1. *Several functions are defined below.*

- $g(p) = \dfrac{x-5}{x+3}$ *with domain* $[0, \infty)$.
- $T(w) = |w-4|+1$ *with domain* $(-\infty, 0)$.
- $v(F) = 3\sqrt{5-F}-4$ *with domain* $[-5, 5]$.
- $L(x) = 3x-4$ *with domain* $(-\infty, \infty)$.

Exercise 1 *Solve the following equations. Enter DNE if a solution does not exist.*

$g\left(\boxed{5}\right) = 0$

$g\left(\boxed{1}\right) = -2$

Exercise 2 *The equation* $T(w) = \dfrac{3}{2}$ *has two solutions.*

The lesser solution is $\boxed{7/2}$.

The greater solution is $\boxed{9/2}$.

Exercise 3 *Solve the following equation. Enter DNE if a solution does not exist.*

$T\left(\boxed{DNE}\right) = -1$
