Definition 1. *Several functions are defined below.*

- $W(f) = \dfrac{f-3}{f-4}$ *with domain* $(-\infty, 4) \cup (4, \infty)$.

- $k(c) = 2|c - 8| - 3$ *with domain* $[-4, 10)$.

- $y(p) = -\sqrt{2p - 8} + 3$ *with domain* $[5, \infty)$.

- $x(T) = 6 - 3T$ *with domain* $(-\infty, \infty)$.

Exercise 1 *Decide if the following function definition is well-defined.*

$F(n) = W(n) + k(n)$ *with domain* $(-\infty, 4) \cup (4, \infty)$.

Multiple Choice:

  (a) *Well-Defined*

  (b) *Not Well-Defined* ✓

Exercise 2 *Decide if the following function definition is well-defined.*

$F(n) = W(n) + k(n)$ *with domain* $[-4, 10)$.

Multiple Choice:

  (a) *Well-Defined*

  (b) *Not Well-Defined* ✓

Exercise 3 *Decide if the following function definition is well-defined.*

$F(n) = W(n) + k(n)$ *with domain* $[-4, 4) \cup (4, 10)$.

Multiple Choice:

  (a) *Well-Defined* ✓

  (b) *Not Well-Defined*

Exercise 4 *Decide if the following function definition is well-defined.*

$F(n) = \dfrac{x(n)}{k(n)}$ *with domain* $[-4, 10)]$.

Multiple Choice:

(a) *Well-Defined*

(b) *Not Well-Defined* ✓