

## Algebra 2

### Unit: Rational Functions

#### Section: Graphing Rational Functions and Domain and Range

#### Bucket Game: Rational Functions

Directions: Tell whether the equation is an example of a Rational Function or Not a Rational Function.

1.  $f$  of  $x$  equals  $e$  to the  $x$  divided by the quantity  $x$  squared minus  $2x$  plus  $2$
2.  $f$  of  $x$  equals the quantity  $x$  plus  $1$  divided by the quantity  $x$  squared minus  $2x$  plus  $2$
3.  $f$  of  $x$  equals the quantity  $x$  plus  $1$  divided by the absolute value of the quantity  $x$  minus  $1$
4.  $f$  of  $x$  equals the quantity  $x$  cubed plus  $1$  divided by the quantity  $x$  squared minus  $4$
5.  $f$  of  $x$  equals  $\log$  of  $x$  divided by the quantity  $x$  squared minus  $2x$  plus  $2$
6.  $f$  of  $x$  equals the quantity of  $x$  plus  $1$  divided by  $x$

Answers:

1. Not a Rational Function
2. Rational Function
3. Not a Rational Function
4. Rational Function
5. Not a Rational Function
6. Rational Function