Find 2 significant similarities between linear and quadratic:

1. both have a y or $x$ intercept.
they both have patterns
2. when $y$ increases, $x$ increases

Find 2 significant differences between linear and quadratic:
${ }_{3}$. $Q$ is curved, $L$ is straight, rate.
4. $\mathrm{L}: \mathrm{x}$ is doubled, y is doubled. $\mathrm{Q}: \mathrm{x}$ is doubled y is quadrupled.
Find 2 significant differences between linear and inverse:
I: when X incrases, y decreses
5.
inverse never touches an axis
6.

Find 2 significant differences between inverse and quadratic:
7. Q goes up, I goes down
8. $I: y$ is decreased by half $Q: y$ is quadrupled when we double $x$

Find 2 significant similarities between linear and quadratic:
domains are all numbers, any x works
1.
when $x$ increases, $y$ increases
2.
both can cross both the $x$ and $y$ axis
Find 2 significant differences between linear and quadratic:
3. linear is a true (streight) line
${ }_{4} Q$ is exponential

Find 2 significant differences between linear and inverse:
inverses cannot cross the $x$ or the $y$ axis
5.
linear is a streight line
6.

Inverse: when x increases y decreases
Find 2 significant differences between inverse and quadratic:
quadratic will eventual come back up
7.
quadratic can cross both axis
8.

Find 2 significant similarities between linear and quadratic:
cmidianere both can either increase or decrease
Nth dimention 1
both have x and y intercepts,
2.
can both start at zero
Find 2 significant differences between linear and quadratic:
when x is doubles y is doubled, for Q : when x is
3. double $y$ is quadrupled $Q$ : go both increase and
4. linear cannot curve decrease

Find 2 significant differences between linear and inverse:
inverse always goes down I can never have a y or
5. different equations $\quad \mathrm{x}$ intercept
6.

L : when x increase, y inceases, I : when x gets

7. I divides by $\mathrm{x}, \mathrm{Q}$ multiplies by x
8. Q when x gets bigger y gets bigger I when x gets bigger y gets smaller

## Test 1 content:

- for each pattern:
> represent graphically
$>$ write the equation
> fill out a table
- Lab stuff
> Identify variables
> Graph the data
> Graph the uncertainty
> Recognize patterns
> Write out equation
> What does the slope represent
> Make a prediction
> Write a conclusion
- Compare and contrast relationships
- Why do we prefer data informed decisions over wild guesses?

