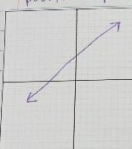
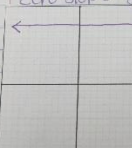


1.1
Types of Functions

I can identify a function by its general equation, graph, and the type of function that would be used to represent a real world situation.

Linear

Rule	Equation	Other Information

Rule	Equation	Other Information
increases/decreases at a constant rate	$y = mx + b$	slope = $\frac{y_2 - y_1}{x_2 - x_1}$ graph - straight line equation - no exponents word - percent
positive slope		negative slope
zero slope $y = \#$		undefined slope $x = \#$

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Page 5

Page 5 with notes

Exponential

Rule	Equation	Other Information

Quadratic

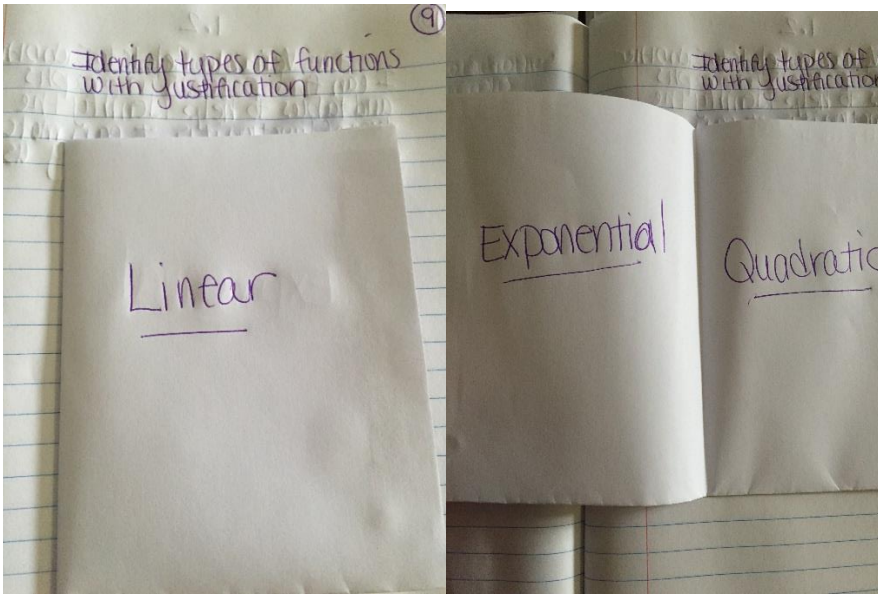
Rule	Equation	Other Information

graph or table, then identify what type of function (linear, quadratic, exponential) the other two options.

Rule	Equation	Other Information
increases/decreases by a constant power	$y = ab^x$	graph - curved - not U - always crosses y-axis but not x-axis equation - x is exponent word - percent
variable is always squared	$y = ax^2 + bx + c$	graph - curved - U - parabola - symmetric equation - x^2 word - need to picture

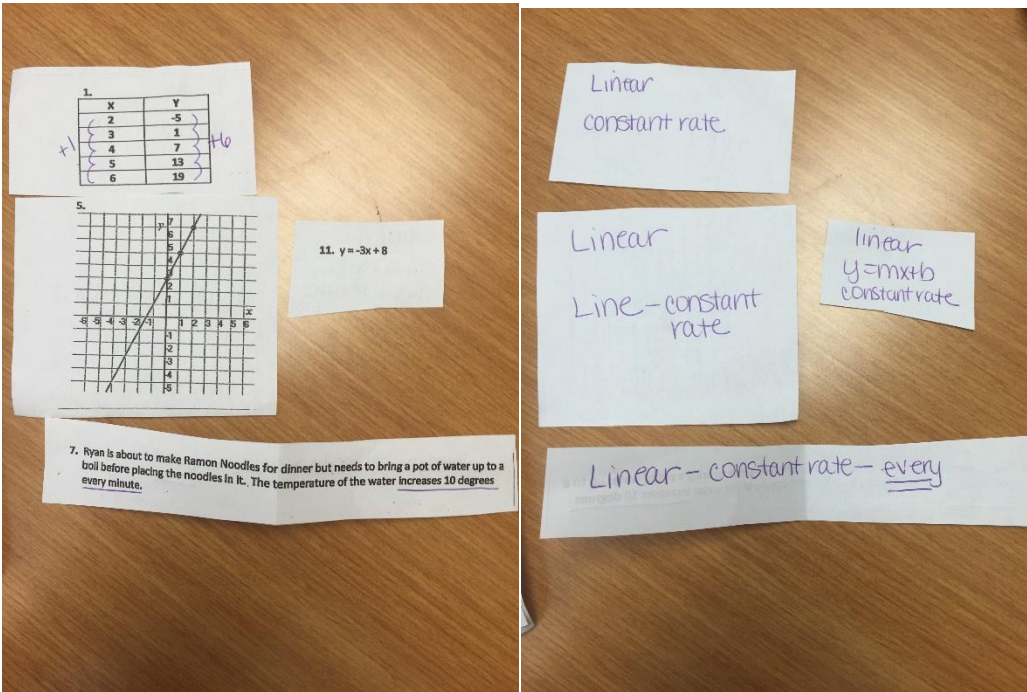
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Page 7 with notes



Page 9

2nd part of pocket page 9



Inside Linear pocket Day 1

X	Y
0	1
1	4
2	16
3	64
4	256

b.

10. $y = 5(3)^x$

9. The number of people who own computers has increased 23.2% annually since 1990. If a million people owned a computer in 1990, how many people will own a computer in 20... (Do not solve)

Exponential
constant power
(x4)

exponential
curve - not U
crosses y-axis
but not
x-axis

exponential
variable
exponent

exponential - %

Inside of Exponential Pocket Day 1

X	Y
-2	1
-1	-2
0	-3
1	-2
2	1

4.

12. $y = -2x^2 - 5x + 12$

8. Tyler kicks a football from ground level at an initial upward velocity of 90 feet per second. How high is the ball at its highest point? (Remember gravity equals 16 ft/sec.) (Do not solve)

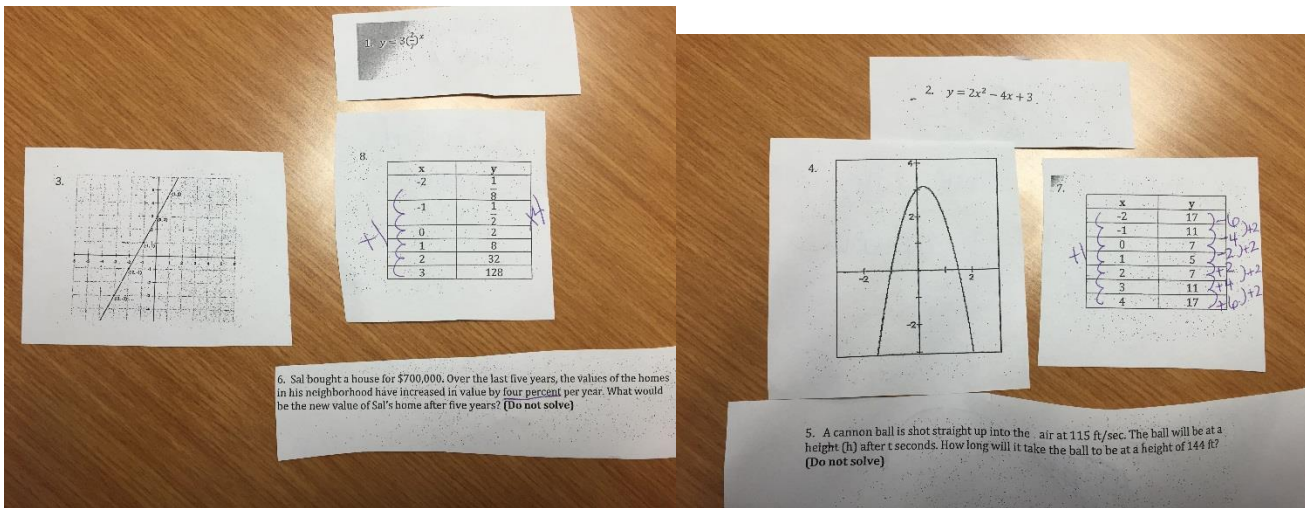
Quadratic
and difference same

quadratic
parabola

quadratic
x²

quadratic - picture of parabola

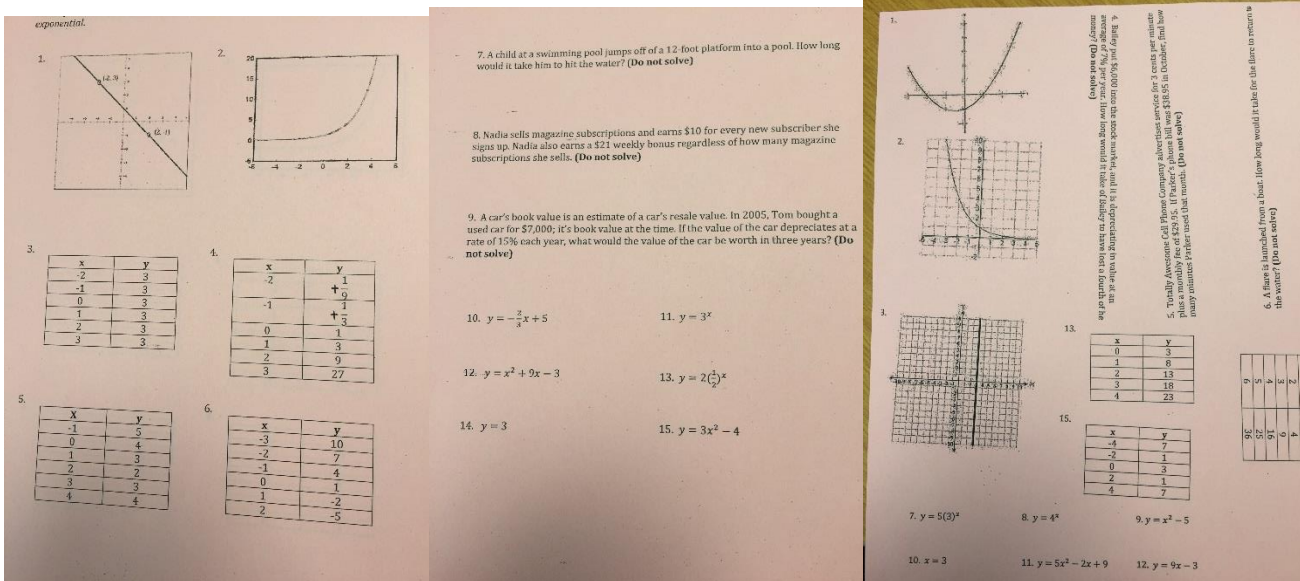
Inside of Quadratic Pocket Day 1



Day 2- Linear

Exponential

Quadratic



Homework-these should be cut up and separated into the correct pocket with justification on the back