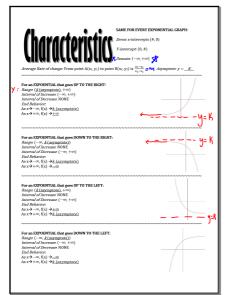
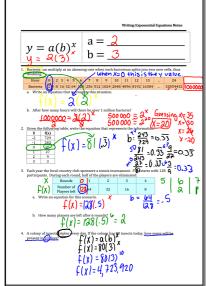


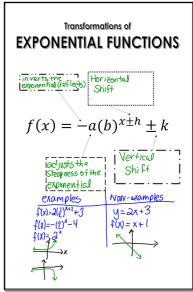
Feb 15-10:49 AM



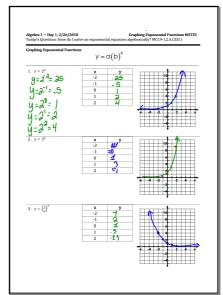
Feb 15-10:51 AM



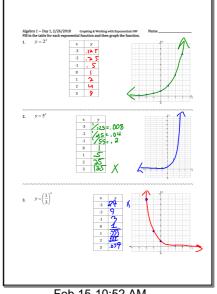
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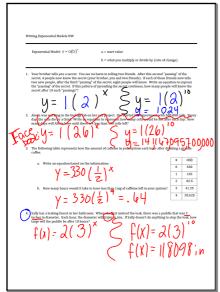
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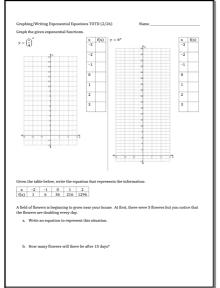
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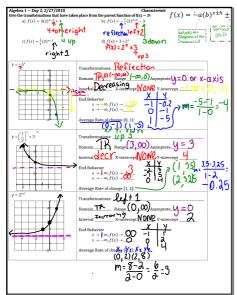
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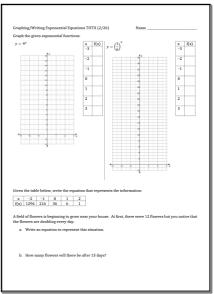
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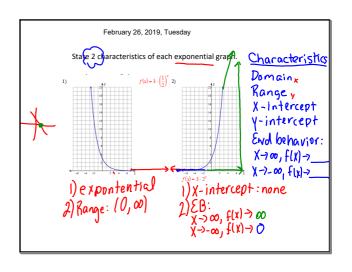
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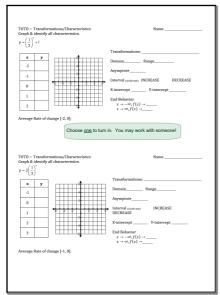
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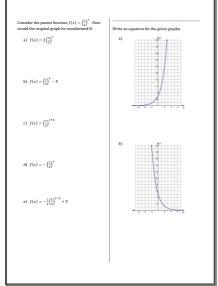
Feb 15-10:53 AM

Algebra $1 \sim \text{Day } 2, 2/27/2018$ Give the transformations that	have taken place from the parent function of $f(x) = 2^x$ .
1. $f(x) = 2^{x+2} - 5$	2. $f(x) = 2^{x-4}$ 3. $f(x) = -2^x - 1$
y = 2**1	Transformations:
	State 3 points on Graph
	Domain Range
2	Asymptote Interval
	X-intercept Y-intercept End Behavior
-4 -2	$x \rightarrow -\infty, f(x) \rightarrow \dots$ $x \rightarrow -\infty, f(x) \rightarrow \dots$
	Average Rate of change [-2, 0]:
y = -3 <sup>a+1</sup> - 2	
	Transformations:
2	State 3 points on Graph
-4 -2	Domain Range
-2	AsymptoteInterval
	X-intercept Y-intercept End Behavior
	$x \to -\infty, f(x) \to \underline{\hspace{1cm}}$ $x \to -\infty, f(x) \to \underline{\hspace{1cm}}$
	Average Rate of change [-2, 0]:

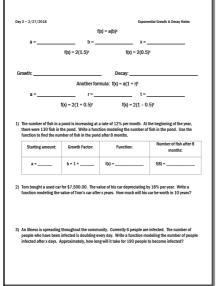
Feb 15-10:56 AM



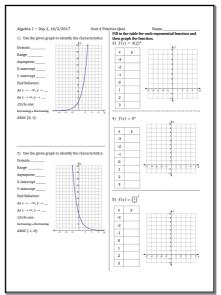
Feb 15-10:56 AM



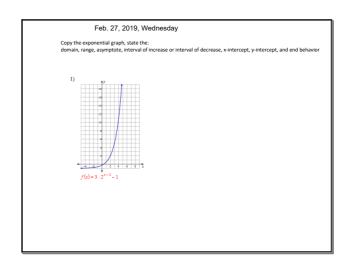
Feb 15-10:57 AM



Feb 15-10:58 AM



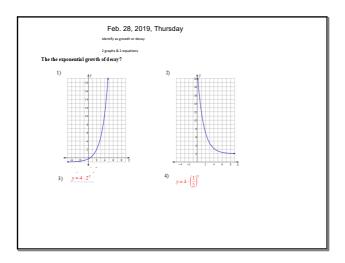
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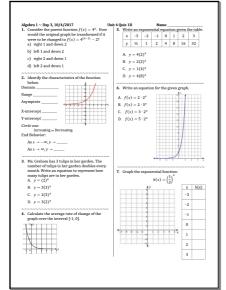
Feb 15-10:57 AM

Day	$y = 2/28/2018$ Growth/Decay HW Name  Growth: $y = P(1+r)^t$ Decay: $y = P(1-r)^t$
1)	The mice population is 25,000 and is decreasing by 20% each year. Write a model for this situation. What will be the mice population after 3 years?
2)	The number of mosquitoes at the beach has tripled every year since 1999, in 1999, there were 2,500 mosquitoes. Write a model for this situation. How many mosquitoes would you predict were at the beach in 2005?
3)	I bought a car for \$25,000, but its value is depreciating at a rate of 10% per year. How much will my car be worth after 8 years?
4)	Your starting salary at a new company is \$34,000 and it increase by 2.5% each year. What will your salary be in 5 years?
5)	In 2010 an item cost \$9.00. The price increase by 1.5% each year. How much will it cost in 20 years?
6)	The yearly profits of a company are \$25,000. The profits have been decreasing by $6\%$ per year. What will be the profits in 8 years?
7)	You bought \$2000 worth of stocks in 2012. The value of the stocks has been decreasing by 10% each year. What will your stock be worth in 5 years?
8)	Your car cost \$42,500 when you purchased it in 2015. The value of the car decreases by 15% annually. How much will your car be worth in 7 years?

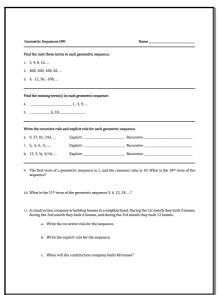
Feb 15-10:59 AM



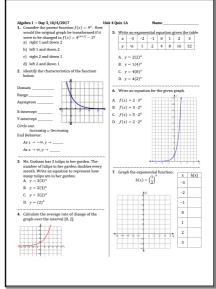
Feb 15-10:59 AM



Feb 15-11:01 AM



Feb 15-11:04 AM



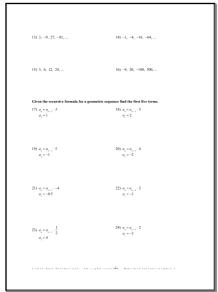
Feb 15-11:00 AM

Jeometric Rect	ırsive Formul	a: Geom	etric Explicit Formula:
	Common ratio	Recursive Formula	Explicit Formula
1, 2, 4, 8, 16,			
$10, -2, \frac{2}{5}, -\frac{2}{25}, \dots$			
5, 15, 45, 135,			
320, 80, 20, 5,			
Find the first five term $g_n = -1(3)^{n-1}$	ns of the geometric se	quence defined as follows:	
f. Find the first five te $g_{\pi} = g_{\pi^{-1}} \cdot \frac{1}{4}, g_1$		sequence defined as follows	:
A colony of ants start		colony triples every year. resent the sequence.	
b. How man	y members will the co	ony have after 3 years?	
c. How many	y years will it take for	the colony to reach greater than	1,000 ants?
Find the common rati	o and the missing terr	n in the sequence	

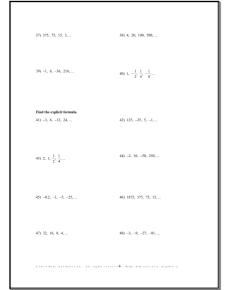
Feb 15-11:02 AM

Algebra I	
Geometric Sequence Practice  State if each sequence is geometric.	DatePeriod
1) -4, 8, -16, 32,	2) 2122640
, , , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , , ,
3) 11, 17, 23, 29,	4) 4, 12, 36, 108,
5) -10, -5, 0, 5,	6) -2, -12, -72, -432,
7) 1, 6, 36, 216,	8) 9, 99, 999, 9999,
Find the common ratio. 9) -4, 8, -16, 32,	10) -3, 9, -27, 81,
11) 2, 8, 32, 128,	12) 4, 12, 36, 108,

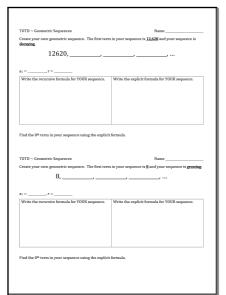
Feb 15-11:04 AM



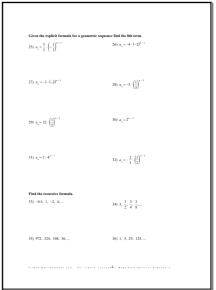
Feb 15-11:04 AM



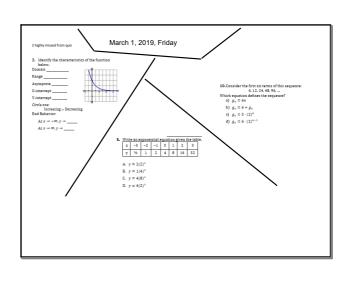
Feb 15-11:05 AM



Feb 15-11:09 AM



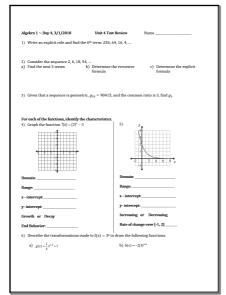
Feb 15-11:04 AM



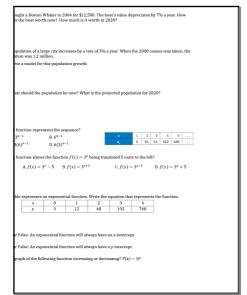
Feb 15-11:05 AM

FOTD ~ Geometric Sequences	Name
Create your own geometric sequence. The first term lecaying.	n in your sequence is 24330 and your sequence is
24330,,	
n =	
Write the recursive formula for YOUR sequence.	Write the explicit formula for YOUR sequence.
Find the 8th term in your sequence using the explici	t formula.
$FOTD \sim Geometric Sequences$	Name
	Namen in your sequence is <b>growing</b> .
Create your own geometric sequence. The first term	
Create your own geometric sequence. The first term	n in your sequence is 3 and your sequence is growing.
Create your own geometric sequence. The first term	n in your sequence is 3 and your sequence is growing.
Create your own geometric sequence. The first term	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	n in your sequence is <b>3</b> and your sequence is <b>growing</b>
3,	in your sequence is 3 and your sequence is growing.
Teals your own geomatric sequence. The first term  3,	in your sequence is 3 and your sequence is growing.
Teals your own geomatric sequence. The first term  3,	in your sequence is 3 and your sequence is growing.

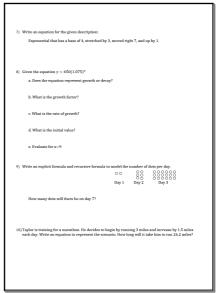
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Feb 15-11:10 AM



Feb 15-11:10 AM

	x v	64	32	2 16	3														
		Is the			xpon	: ential ;	grow	th or	expo	nenti	al de	cay?							
	b)	Writ	e the	equat	ion of	the fu	inctio	n.											
		m is p							iated	l in va	due '	%10	pery	ear.	Write	an e	equa	tion	to
)		the fu						th or	deca	y?					_				
	b)	What	is the	equa	tion o	f the s	asymį	ptote:	_		_								
	c)	Descr	ibe th	e tran	sform	ation	s tha	t occu	r										
) (	Siven	the fu	ınctio	n y =	5(\frac{1}{2})*	+2 _ 3	3												
		Does													-				
	b)	What	is the	equa	tion o	f the a	ısym	ptote:	_		_								
	c)	Descr	ibe th	e tran	sforn	nation	s tha	t occu	r:										

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