

ARC Week at Glance

Subject: Math

Course: Advanced Algebra Concepts & Connections

Grade: 10th – 12th

Dates: 10/21 to 10/25

Standard(s): AA.FGR.3 Explore and analyze structures and patterns for exponential functions. AA.FGR.3.2 Analyze, graph, and compare exponential and logarithmic functions. AA.MM.1.2 Create mathematical models to explain phenomena that exist in the natural sciences, social sciences, liberal arts, fine and performing arts, and/or humanities contexts. Assessment(s): <input checked="" type="checkbox"/> Quiz <input type="checkbox"/> Unit Test <input checked="" type="checkbox"/> Project <input type="checkbox"/> Lab <input type="checkbox"/> None						
	Learning Target (I am learning about...)	Criteria for Success (I can...)	Opening (10 - 15 Mins)	Work-Session (20 - 25 mins)	Closing (5 - 10 mins)	Literacy Tasks/Focus
			<i>(Include at least one/two formatives*in any part of the lesson as needed)</i>			
Monday	I am learning about models for exponential growth and decay functions used in real-life.	I can solve application problems using exponential growth & decay models.	Return Quiz (feedback)	Complete Modeling Applications with Exponential Growth & Decay #'s 1 and 3 with teacher guidance	Complete Modeling Applications with Exponential Growth & Decay #'s 2 and 4 with partner	What key words indicate using an exponential growth model? ... exponential decay?
Tuesday	I am learning about exponential growth & decay functions in real-life	I can calculate interest and value using the compound interest formula.	You strike a deal with you parents: if you perform all your chores for 30 days, you will get paid a penny on the first day then they will double the value each day. How much will they owe you on day 30?	Interest Problems Learning Task Parts I and II	Begin "Which Job Would You Choose?" Project due Monday, Oct. 28th & remember that I will PRE-CHECK all week (only before due date)	Compare interest rate, compounding times and time's effects on balances and interest.
Wednesday	I am learning about exponential growth & decay functions in real-life	I can calculate interest and value using the continuous interest formula.	Determine value of n: quarterly, semi-annually, monthly, daily, every minute	Interest Problems Learning Task Parts III and IV	Continue "Which Job Would You Choose?" Project	Compare linear and exponential growth patterns and make comparisons when choosing better outcomes over time

Thursday	I am learning about exponential growth & decay functions in real-life	I can choose and use the appropriate formula to solve real - life exponential applications.	#’s 8 and 9 on Practice with Applications with Exponential Growth & Decay	Complete Practice on Applications with Exponential Growth & Decay <i>*formative</i>	Pre-check and provide feedback on Which Job Would You Choose? Project due Oct. 13th	Compare interest compounded daily to compounded continuously problems (See opening)
Friday	I am learning about exponential growth & decay functions in real-life	I can choose and use the appropriate formula to solve real - life exponential applications.	I can precheck Which Job? Projects while you take the quiz and conference with you after quiz if desired.	Quiz on Applications with Exponential Growth & Decay	See Opening	Which job should you choose? Why? Is the salary better over the ENTIRE time period? If not, for how many years?

*☐ Exit Ticket/Final Stretch Check ☒ Electronic Tools ☐ Dry Erase Boards – quick checks ☐ Turn & Talk Discussion (verbal responses) ☐ Teacher Observation – document Clipboard
☐ Quick Write/Draw ☐ Annotation ☐ Extended Writing ☐ Socratic Seminar ☐ Jigsaw ☐ Thinking Maps ☒ Worked Examples ☐ Other : _____