Mathkind

JAPAN: PLANTING A PAINTING

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GRADE 8 EXPRESSIONS AND EQUATIONS		
CCSS 8.EE.C* Analyze and solve linear equations and pairs of simultaneous linear equations.		
CCSS 8.EE.C.7*	Analyze and solve pairs of simultaneous linear equations.	
	CCSS 8.EE.C.7.A* Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.	
	CCSS 8.EE.C.7.C* Solve real-world and mathematical problems leading to two linear equations in two variables. For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.	
EXAMPLES OF STUDENT DISCOVERY		
The rice needs to peak at the same time for the viewing, but the watering schedule for each plant is different. Provide two different plant schedules (for example: Plant 1 starts at three inches and grows two inches every week, while Plant 2 starts at four inches and grows one inch every week). Students will need to find where these two plants are the same height. When will		

that be? Students may make a table or graph (or both), and discover that the intersection point is where they will be the same height. There can be multiple situations that students have to compare.

This concept can be further discovered with the cost of making a field vs. the profit of the field. When will they break even?