

Uncharted: Day 2

Lesson objective:

Students will be able to:

- Recognize the aspects of a coordinate plane and solve for lengths between points using the Pythagorean Theorem
- Understand the Distance Formula as a derivative of the Pythagorean Theorem
- Solve for distances using the Distance Formula and coordinate

Assessment:

- Exit questions
- Students will turn in their worksheet

Key Points:

• In this lesson, Students will learn the concept of the Distance Formula and understand it as a derivative of the Pythagorean Theorem.

Component:	Teacher & Student Actions	Materials	
Warm-Up or Hook [5 min]	• Do Now	Day 2 Handouts or blank paper	
Review [5 min]	• Teacher will review key concepts from lesson 1	Slides	
Introduction of New Material [15 min]	 Teacher will show how the pythagorean theorem can be used for solving distance, review elements of a coordinate plane, and introduce the distance formula Teacher will play a short Khan Academy video reviewing the distance formula 	Slides	
Guided Practice [15 min]	Teacher will work through an example using the distance formula	Slides	
Independent Practice [15 min]	 Students will work independently or in groups to complete the distance formula worksheet If time permits, the class will review their answers to the worksheet 	Day 2 Handouts Answers in slides Calculators	



Closing [5 min]	Exit Ticket		<u>Daily</u>
	 Ask students to complete their Daily Learning 	<u>Learning Logs</u>	
	Log		

Differentiation Considerations:

- Support during worksheet activity
- · Working in groups during the worksheet activity, if necessary

Standard(s):

Common Core Standards

- CCSS.MATH.CONTENT.HSG.GPE.B.7 Use coordinates to compute perimeters of polygons and areas of triangles and rectangles, e.g., using the distance formula.
- CCSS.MATH.CONTENT.HSG.GPE.B.4 Use coordinates to prove simple geometric theorems algebraically.
- CCSS.MATH.PRACTICE.MP1 Make sense of problems and persevere in solving them.
- CCSS.MATH.PRACTICE.MP2 Reason abstractly and quantitatively.
- CCSS.MATH.PRACTICE.MP3 Construct viable arguments and critique the reasoning of others.
- CCSS.MATH.PRACTICE.MP4 Model with mathematics.
- CCSS.MATH.PRACTICE.MP5 Use appropriate tools strategically.
- CCSS.MATH.PRACTICE.MP6 Attend to precision.
- CCSS.MATH.PRACTICE.MP7 Look for and make use of structure.
- CCSS.MATH.PRACTICE.MP8 Look for and express regularity in repeated reasoning.