

Algebra 1 Unit 3: Two-variable Statistics

Lessons 1-6: Two-way Tables and Scatter Plots

Explore, Play, and Discuss	<ul style="list-style-type: none"> I can describe what the values in a two-way table mean in everyday language. I can draw a linear model that fits the data well and use the linear model to estimate values I want to find. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> Lesson 1 Activities 1 and 2: Students complete in an online or paper journal. Activity 2 benefits from a worked example. Lesson 4 Activities 1 and 2: Students complete in an online or paper journal. 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> Check Your Readiness assessment: Administer all 6 items within the first day or two of this section. Use the guidance provided with each problem to adjust instruction so that students can access the math in the unit. Lesson 1 cool-down

Deep Dive	<ul style="list-style-type: none"> I can look for patterns in two-way tables and relative frequency tables to see if there is a possible association between two variables. I can describe the rate of change and y-intercept for a linear model in everyday language. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> Activity 2.2: Sync discussion Activities 3.1 and 3.2: Sync discussion Activities 4.3 and 4.4: Sync discussion 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> Lesson 3 cool-down

Synthesize and Apply	<ul style="list-style-type: none"> I can calculate values in a relative frequency table and describe what the values mean in everyday language. I can use technology to find the line of best fit. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> Activity 2.3: Students can complete in an online or paper journal. Lesson 5: Students can complete in an online or paper journal. Activity 2 includes a virtual card sort. 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> Lesson 2 cool-down Lesson 5 cool-down End-of-Unit Assessment items 5 and 6.

Ongoing Practice

- Assign one or more of the distributed practice problem sets from Lessons 1–6 to be completed over the time period that the section is being worked on.
- These could also be lagging, so that students are working on practice problems from the previous section or unit during this section or unit.
- Specify which problems students should submit, or let them choose.
- Note: Several existing platforms already have IM’s practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources

- Activity 1.3: Info Gap
- 3.2 Are you ready for more
- Lesson 6
- Unit 1 Lesson 16 Activity 2 (Modeling Activity).
- Unit 2 Lesson 26 Activity 3 (Modeling Activity).
- Teach and encourage students to study the lesson summaries (at the end of every lesson) and refer back to them.

Lessons 7–10: Correlation Coefficients

Explore	<ul style="list-style-type: none"> I can reason about linear models and scatter plots. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> ➤ Activity 7.1: Students can complete in an online or paper journal. ➤ Activity 7.2: Virtual Card Sort 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> ➤ Journal entry: What do you think the r-value in the card sort activity meant?

Dive Deep	<ul style="list-style-type: none"> I can match the correlation coefficient with a scatter plot and linear model. I can describe the goodness of fit of a linear model using the correlation coefficient. I can look for connections between two variables to analyze whether or not there is a causal relationship. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> ➤ Synthesize Activity 7.2, introduce “r-value.” ➤ Activity 7.3: Sync discussion ➤ Activities 9.1 and 9.2: Sync discussion 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> ➤ Lesson 7 cool-down

Synthesize and Apply	<ul style="list-style-type: none"> I can describe the strength of a relationship between two variables. I can use technology to find the correlation coefficient and explain what the value tells me about a linear model in everyday language. 	
	<p>Activity Suggestions:</p> <ul style="list-style-type: none"> ➤ Lesson 8: Can be completed in an online or paper journal. Benefits from a worked example on using technology. ➤ Activity 9.3: Can be completed in an online or paper journal. 	<p>Assessment Suggestions:</p> <ul style="list-style-type: none"> ➤ Lesson 8 cool-down ➤ Lesson 9 cool-down ➤ End of Unit Assessment Items 2, 3 and 4.

Ongoing Practice

- Assign one or more of the distributed practice problem sets from Lessons 1–6 to be completed over the time period that the section is being worked on.
- These could also be lagging, so that students are working on practice problems from the previous section or unit during this section or unit.
- Specify which problems students should submit, or let them choose.
- Note: Several existing platforms already have IM’s practice problems loaded so that students can complete and submit them online. Some can be autoscored.

Anytime Resources

- Teach and encourage students to study the lesson summaries (at the end of every lesson) and refer back to them.
- Lesson 7: Are You Ready for More?
- Lesson 8: Are You Ready for More?
- Lesson 9: Are You Ready for More?
- Lesson 10