Send as an attachment via email to [adlerml@scsk12.org](mailto:adlerml@scsk12.org). Save file as: LessonPlans\_Last NameFirstInitial\_MonthDay

Example: LessonPlans\_AdlerA\_Aug10

Boxes will expand as necessary when you type. Due by 11:59 Friday of week before scheduled plans.

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| Teacher | Teri Lindsey |
| Class | Algebra I |

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|  | **Date: 12-12** | **Date: 12-13** | **Date: 12-14** | **Date: 12-15** | **Date: 12-16** |
| **Standard**  (Reference State, Common Core, ACT College Readiness Standards and/or State Competencies.) | F-IF.B.6 Calculate and interpret the average rate of change of a function (presented symbolically or as a table) over a specified interval. Estimate the rate of change from a graph.  F-IF.B.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity. | | | | |
| **Objective**  (Clear, Specific, and Measurable, student-friendly) | I can manipulate linear equations from standard form to slope-intercept form and vice versa. I can determine which form is best suited to a given situation. | 8th Grade Field Trip | I can determine how changing slope and/or y-intercept affects a linear graph.  I can discover and explain how to determine if two lines will be parallel or perpendicular by inspecting their equations. | I can solve a system of linear equations by graphing. | I can locate points on a coordinate graph and follow instructions to create a specific design. |
| **Connections to Prior Knowledge** | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. | Checks for Understanding each day will make connections to prior knowledge by providing concentrated practice of previous learned skills. |
| **Guiding Questions**  (Motivator / Hook  An Essential Question encourages students to put forth more effort when faced with complex, open-ended, challenging, meaningful and authentic questions.) | Why do we need two forms of a linear equation? What purpose does each serve? |  | How is slope related to parallel and perpendicular lines? | What does the intersection of two linear graphs represent? |  |

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| **Instructional Strategies**  (Step-By-Step Procedures – Sequence  Discover / Explain – Direct Instruction  Modeling Expectations – “I Do”  Questioning / Encourages Higher Order Thinking  Grouping Strategies  Differentiated Instructional Strategies to Provide Intervention & Extension, **Literacy Task**) | TTW present examples and define the slope-intercept form and the standard form of the equation of a line.  TTW demonstrate how to find the slope, x- and y-intercepts and graph each form.  TTW check for understanding to ensure that all students are able to find each of these key features with either form of equation.  TSW work in groups of 3 to complete an investigation assignment. |  | TTW present examples to guide students to think about the function of the slope and the y-intercept as they relate to the graph of a line and to consider how changing one or the other affects the graph.  TSW work in groups of 3 to complete an investigation assignment to discover the effects of certain changes in key elements of the linear equation, including parallel and perpendicular lines. | TTW guide students to recall a couple of linear equations with different slopes and same y-intercepts from the previous lesson to draw attention to the point of intersection and emphasize the coordinates of that point. The teacher will ask strategic questions to guide students to understand that the point of intersection is the only point that will satisfy the equations of both lines.  TSW work in groups of 3 to complete an investigation assignment to discover the graphical solution to systems of equations. | Students will plot points and connect them to create a design. |
| **Differentiated Tasks**  (Activities based on students’ needs and learning styles, IEP modifications) | TTW guide students through several examples and gradually release them to work independently.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  TSW complete Graphing Linear Functions Stations 1-8 |  | TTW guide students through several examples and gradually release them to work independently.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  TSW complete Graphing Linear Functions Stations 1-8 | TTW guide students through several examples and gradually release them to work independently.  Below Expectation:  TTW provide support as students work.  At Expectation:  Students will work independently.  Above Expectation:  TSW complete Graphing Linear Functions Stations 1-8 |  |
| **Assessment**  (Aligned with the Lesson Objective  Formative / Summative  Performance-Based/Rubric  Formal / Informal) | Formative:  Investigation assignment  HW worksheet converting between slope-intercept and standard forms. |  | Formative:  Investigation assignment  HW worksheet writing equations of parallel and perpendicular lines | Formative:  Investigation assignment  No HW |  |
| **Closure**  (Reflection / Wrap-Up  Summarizing, Reminding, Reflecting, Restating, Connecting) | Lesson summary:  I can solve an equation for *y* to put it in slope-intercept form.  I can use the slope-intercept form when I want to find the slope and the y-intercept of a line.  I can convert an equation from slope-intercept form to standard form.  I can use standard form when I want to find the x-and y-intercepts. |  | Lesson Summary:  I can describe how changing the slope and y-intercept affects the graph of a linear equation.  I know that changing the y-intercept of an equation (keeping the slope the same) creates an equation of a line that is parallel to the original line.  I know that two equations whose slopes are opposite reciprocals create lines that are perpendicular to each other. | Lesson Summary:  I can graph two equations to find the point of intersection and know that its coordinates are the only ones that satisfy both equations. |  |
| **Resources/Materials**  (Aligned with the Lesson Objective  Rigorous & Relevant) | Glencoe, Algebra I text  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Glencoe, Algebra I text  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Glencoe, Algebra I text  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Glencoe, Algebra I text  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) | Glencoe, Algebra I text  **Additional Resource(s)**  [**CCSS Flip Book with Examples of each Standard**](http://www.azed.gov/azccrs/files/2013/11/high-school-ccss-flip-book-usd-259-2012.pdf) |