

DAY 11

PRACTICE DAY: GROUP WORK

Performance Objectives:

- Given an equation in standard form, students will be able to convert it to slope-intercept form 9 out of 10 times.
- Given an equation in point-slope form, students will be able to identify the slope, or convert the equation to slope-intercept form and then identify the slope 4 out of 5 times.
- Given the equation of a line in slope-intercept, standard or point-slope form, students will be able to recognize y-intercept from slope-intercept form or convert standard form or point-slope form to slope-intercept form 4 out of 5 times.
- Given a point that lies on the line and the slope of the line, students will be able to substitute the values appropriately into slope-intercept form and solve the resulting equation for the y-intercept 4 out of 5 times.
- Given the slope and the y-intercept, students will be able to substitute the values into slope-intercept form of the equation of a line 5 out of 5 times.

Resources or Materials Needed

Materials:

- ✓ Answers for the homework due today: *Homework-Day 10* (See Appendix SS)
- ✓ Group work problems-one for each student: *GroupWork-Day 11* (See Appendix TT)
- ✓ Key for group work problems: *GroupWork-Day 11 KEY* (See Appendix UU)
- ✓ Copies of tonight's homework: *Homework-Day 11* (See Appendix VV)

Resources:

- ✓ Projector
- ✓ Computer
- ✓ Wi-Fi
- ✓ Each student will need an internet enabled device to use the Desmos Scientific Calculator. Link: <https://www.desmos.com/scientific>

Time: 45 minutes

Step 1: Pre-Instructional Activities: Check students' homework and project answers on the board, answer student questions about the homework.

Step 2: Content Presentation: n/a.

Step 3: Learner Participation: Students will be completing problems in assigned small groups. Groups should have 3 or 4 students at varying levels (heterogeneous groups). Each student is responsible for completing all the problems. Remind students that they can use their Desmos Scientific Calculator as a tool to help them!

Each student in the group will become the 'expert' on two problems, by working out the answer. After all students have become the 'experts,' they then will explain their answers and the process to the others in the group.

Step 4: Assessment: Formative assessment through teacher observation.

Step 5: Follow-Through Activities: These types of problems will be included as future "Do-Nows" so learners continue to practice. The skills practiced here will continue to be used when learning how to write equations of lines parallel or perpendicular to a given line throughout the remainder of the unit.