

# LESSON PLAN OUTLINE

EDEC 262 - Media, Technology & Education  
Kevin Paquette



**LEARNING GOAL: TO CALCULATE AND INTERPRET A SLOPE**

**GRADE LEVEL: GRADE 9 (SECONDARY III)**

## **LEARNING OBJECTIVES:**

- To understand the effect slope has on a line (e.g. how steep the line is), using Desmos\* ([student.desmos.com](http://student.desmos.com)) by the end of the first class with little to no errors
- To determine the slope of a line correctly with 85% accuracy using the formula  $a=(y_2-y_1)/(x_2-x_1)$
- To determine if lines are parallel, perpendicular, or neither (with respect to each other or a given line) using only the slope of the lines and the relationship that lines are perpendicular if their slopes are the negative reciprocals of each other with 85% accuracy

\*There will be lines pre-loaded into the software using [teacher.desmos.com](http://teacher.desmos.com), including activities (explained in the next section)

## **TYPES OF TECHNOLOGY USED:**

Online graphing software  
([www.desmos.com](http://www.desmos.com), [teacher.desmos.com](http://teacher.desmos.com), [student.desmos.com](http://student.desmos.com))

## **ACTIVITIES: (DESMOS)**

Line game where students have to fix the equations to collect stars  
Altering pre-loaded lines to understand the implication of slope

## **LEARNING OUTCOMES:**

Google form as a quiz asking students to determine if lines are perpendicular, parallel, or neither