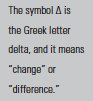
1-1 Rise Over Run Notes Key

You may have heard the words pitch, slant, or steepness. What do these terms mean?

They are words to describe **slope**.

**Slope** is a ratio that compares the change in a **vertical** distance to the change in a **horizontal** distance. It is a ratio between these two numbers.



**slope:** a ratio of rise to run which indicates how steeply something is slanted

Slope can be expressed as follows.

**Picture 6.png**

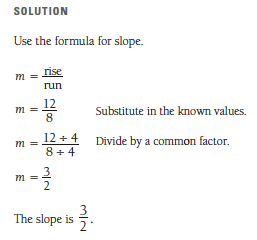
The variable m is used to represent slope. The change in vertical distance is also called

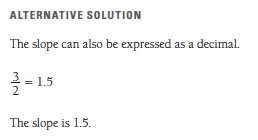
the rise, and the change in horizontal distance is also called the run. Slope can therefore

be expressed as follows.

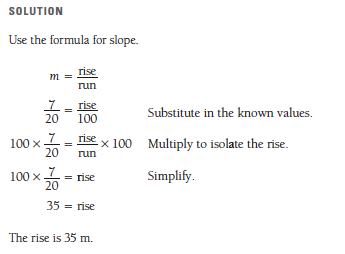
**Picture 8.png**

Example 1) Calculate the slope of a line that has a rise of 12 cm for a run of 8 cm.





Example 2) The slope of a line is 7/20. What is the rise if the run is 100 metres?



Example 3) Harbinder is building a ramp in two sections, both with the same slope. If one

section rises 2 m for a run of 6.5 m, how much will it have to rise for the remaining

run of 9.8 m?

