

Last class, we learned this!

$$\text{Grade of a Road} = \frac{\text{Length of Road's Rise}}{\text{Length of Road's Run}}$$

1. (1 point) Suppose a road has a rise of 125 feet, and a run of 2591 feet. What's its grade?
2. (1 point) Suppose a road has a rise of 500 feet and a run of 2 miles. What's its grade?

Last Saturday, I made my annual pilgrimage to the summit of Broken Top<sup>1</sup>. It's a wonderful, gorgeous climb and a badass, speedy descent. In the picture at right, you'll see our son, Max, bombing down the scree slide after our trip to the summit in 2019.

The summit of Broken Top is at about **9177** feet above sea level, and the scree field Max is running on starts the summit and ends at an elevation of about **7580** feet above sea level. Over that distance, it has a run on about **0.6** miles. If you need a visual of it, [you can click here!](#)



3. (2 points) (w) What's the grade of that scree field, to the nearest percent? Be sure to show me at *least* the conversion you do (hint, hint)!
4. (1 points) Now that you know that last grade, describe what a slope with a 100% grade would look like!

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<sup>1</sup> The mountain. Not the posh neighborhood. 😊