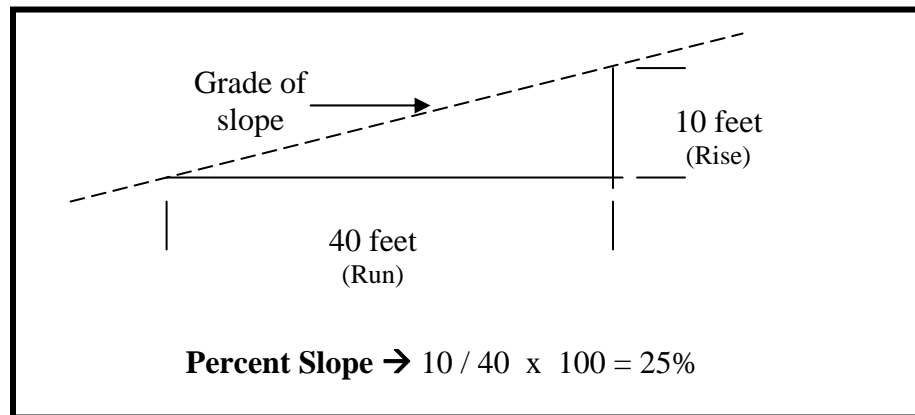


Concepts of Slope:
definitions related to percent, degree, & grade of slope

- **Slope:** the deviation of a surface from the horizontal. Slope is usually expressed in **percent or degrees**. **Grade** is another term used for slope. Often “grade” is used in relation to a condition after construction (for example, a 6 percent grade on a highway)
 - o **Degree** of slope is measured in degrees from horizontal (0 – 90)
 - A 45-degree slope is a 100 percent grade.
 - o **Percent** slope is calculated by taking the rise of the slope divided by the run multiplied by 100 (see example below)
 - Example: a section of land 40 feet in length that rises 10 feet in height has a slope of **25 %**



- Slope can also be expressed as a **ratio**. Slope expressed as a ratio is the **height: length**. In the illustration above, as a ratio it would be expressed as a 1:4 slope which is a 25 percent slope. This is accomplished by dividing the ratio → $10 / 40 = 1 / 4 = .25 \times 100 = 25\%$