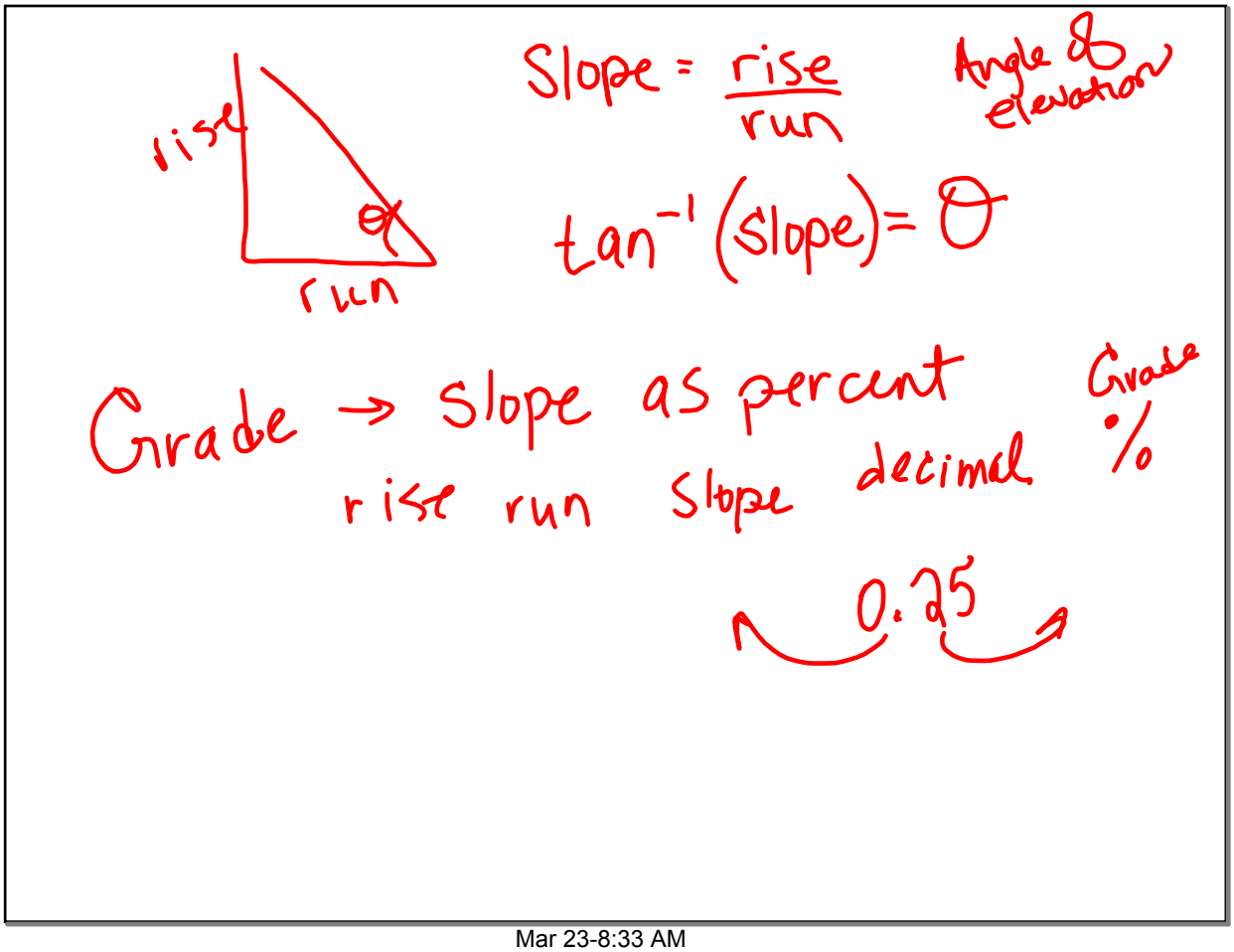

Mar 23-8:33 AM

Slope Unit

Slope = rise/run

Slope from a graph--> choose any two points on the line and calculate the rise (numerator) and run (denominator) from one point to the other. This is your fraction rise/run which is the slope of the line.

Slope from 2 points --> y_2-y_1/x_2-x_1 * remember that an ordered pair is x value first then y value (x,y)

Angle of elevation --> to find an angle of elevation using slope, we will always use the tangent ratio because the rise is the same as the opposite side, and run is the same as the adjacent side. tanθ=opp/adj the same as tanθ= rise/run

so tanθ= slope

so θ= $\tan^{-1}$(slope)

Grade--> describes the slope of a hill or ramp as a percent. You can still find slope using rise/run, but now you will be able to convert that to a percent to write the grade .

rise/run is your fraction. Top divided by bottom gives you the decimal. Decimal times 100 gives you the percent. You should also be able to work in the opposite direction.

Mar 23-3:22 PM