**Math 11 AWP Unit 5 – Slope and Rates of Change**

Assignment 4 – Angle of elevation, tangent and slope

1. Calculate the missing angles and the slope of the hypotenuse.
2.  b.
3.  d.
4. Jon is building a wheelchair ramp at his grandmother’s house. The ramp will rise 1.2 m over a run of 7.2 m. Jon will purchase roll roofing to lay on the ramp to create a non-slip surface.
5. What length of roll roofing will Jon have to purchase to cover the wheelchair ramp?
6. What is the angle of elevation of the ramp?
7. Akiko works as a ski instructor. He has read that human-triggered avalanches occur most often on slopes with an angle of elevation between 35° and 45°.
8. What are the slopes of these two angles of elevation?
9. What are the percent grades?
10. Aurena is installing a pipe for drainage.