**Foundations of Math 11 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

 **Trigonometry March 2020**

1. For each of the following, determine if it is an ambiguous case. If it is an ambiguous case, determine if the number of possible solutions (none, one or two). [ 6 ]

(a) A = 42, b = 7, a = 5 (b) M = 40, m = 7, p = 5 (c) D = 60, d = 10, b= 12

2. Solve each of the following triangles. **If there is more than one triangle possible for the measurements provided, sketch both triangles and solve BOTH triangles with proper labels! [** 6]

 , and 

3. Stella decided to ski to a friend’s cabin. She skied 8.0 km in the direction N40°E. She rested, then skied S30°E and arrived at the cabin. The cabin is 9.5 km from her home, as the crow flies. Determine, to the nearest tenth of a kilometre, the distance she travelled on the second leg of her trip.

**(Must include a sketch)** [4]