

## CIV102F Quiz # 2: Friday AM September 25, 2020

### Basic Concepts

For the system of weights, wires and pulleys shown below, perform the following:

1. Solve for the tension forces in all of the wires. Note that all pulleys are frictionless.
2. Calculate all of the stresses in all of the wires.
3. How much force does the 300 kg weight on the left apply to the ground?
4. How heavy must the weight on the right be so that it neither slides nor lifts up? Report your answer in kg.

The geometry of the wires can be obtained using the provided length values. Free body diagrams must be provided in order to obtain full marks.

