Problem M18: Aluminum 7075-T6 has a fracture toughness of 24 MPa√m. As part of the design for damage tolerance requirements for the wing skin component you analyzed in M17 it is required that the critical crack size be greater than 5 mm (so that it can be detected by non destructive evaluation (NDE) techniques). Assume that the worst case is for a crack orientated perpendicular to the maximum tensile stress component. Verify that the thicknesses you specified in M17 will meet the damage tolerance requirement. If they do not, then specify a new value of the thickness that will allow the panel to meet both the strength and the damage tolerance requirements.