## Practice Problems (20 points) Use engineering paper to draw your Mohr’s Circles and show calculations of parameters.

1. (4 points) Make up a stress state   
    σx, = \_\_\_\_\_\_\_\_\_\_\_\_\_, σy, = \_\_\_\_\_\_\_\_\_\_\_\_\_, and τxy) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Draw a Mohr’s Circle and use it to calculate:
      1. Center and Radius of the circle
      2. σp1, σp2, and τmax
      3. θp
   2. Check your answer by using MM M12.19
2. (4 points) Make up a stress state   
    σx, = \_\_\_\_\_\_\_\_\_\_\_\_\_, σy, = \_\_\_\_\_\_\_\_\_\_\_\_\_, and τxy) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Draw a Mohr’s Circle and use it to calculate:
      1. Center and Radius of the circle
      2. σp1, σp2, and τmax
      3. θp
   2. Check your answer by using MM M12.19
3. (4 points) Make up a stress state   
    σx, = \_\_\_\_\_\_\_\_\_\_\_\_\_, σy, = \_\_\_\_\_\_\_\_\_\_\_\_\_, and τxy) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Draw a Mohr’s Circle and use it to calculate:
      1. Center and Radius of the circle
      2. σp1, σp2, and τmax
      3. θp
   2. Check your answer by using MM M12.19
4. (4 points) Make up a stress state   
    σx, = \_\_\_\_\_\_\_\_\_\_\_\_\_, σy, = \_\_\_\_\_\_\_\_\_\_\_\_\_, and τxy) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Draw a Mohr’s Circle and use it to calculate:
      1. Center and Radius of the circle
      2. σp1, σp2, and τmax
      3. θp
   2. Check your answer by using MM M12.19
5. (4 points) Make up a stress state   
    σx, = \_\_\_\_\_\_\_\_\_\_\_\_\_, σy, = \_\_\_\_\_\_\_\_\_\_\_\_\_, and τxy) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   1. Draw a Mohr’s Circle and use it to calculate:
      1. Center and Radius of the circle
      2. σp1, σp2, and τmax
      3. θp
   2. Check your answer by using MM M12.19