Math 112—HW 5 Rubric

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The homework consisted of the following problems

- 2.3A (3–5)
- 2.4A (1–4, 6, 7)
- 2.5A (2–8, 11, 13)

Section 2.3

3. 6 points. 3 points for each part: 1 point for drawing the circle, 1 point each for the sine and cosine values (make sure to grade the sine and cosine values based on the angle they draw in the unit circle)

4. 4 points. 2 points for each part, graded on correctness.

5. 3 points. 1 point for showing some kind of work, 1 point each for sine and cosine.

Section 2.4

1. 7 points

(a) 2 points. 1 point each for midline and amplitude. Midline should be an equation, not just a number (e.g. $y = -1$ is correct, but the student should lose half a point for just writing -1).

(b) 2 points. Same as (a).

(c) 3 points. 1 point for effort, 1 point for each correct graph.

2. 12 points. 3 points to each part (1 for graph, 1 for midline, 1 for amplitude)

3. 4 points. 2 points to each part (1 for the x-coordinate, 1 for the y-coordinate)

4. 4 points. 1 point for showing some kind of work. The remaining 3 points should be distributed according to how well they know what is going on (0 points for no understanding, 1 point for a serious error, 2 points for a minor error, 3 points for complete correctness)

6. 4 points. Same as 4.

7. **(a)** 3 points. 1 each for period, midline, and amplitude.

(b) 2 points. 1 each for radius and center.

(c) 2 points. 1 each for A and k. Make sure to grade based on above here (e.g. if they get radius and center flipped in (b), then having A and k flipped here is okay).

Section 2.5

2. 2 points. 1 point for showing work, 1 point for correct answer. Note that you can see several versions of the same correct answer (e.g. $\frac{8}{\sqrt{561}} = \frac{16}{\sqrt{1122}}$)

3. 2 points. Same as 2.

4. 2 points. Same as 2.

5. 2 points. Same as 2.

6. 2 points. Same as 2.

7. 3 points. 1 point for showing work, 1 point for making progress (e.g. finding other side lengths or angles), 1 point for the correct answer.

8. 3 points. Same as 7. Note that students may give the answer in point-slope form ($y = \sqrt{3}(x-1)$) and this is worth full credit. If a student doesn't compute tan(60), they shouldn't lose points.

11. 4 points. 2 points to each part (1 for having some work, 1 for a correct answer).

13. 4 points. 1 point for showing work, 1 point for making progress. 1 point for getting most of the way (with maybe a minor mistake), 1 point for the correct answer.