EMCF18 – Math 1432, 13209

The answer sheet for this assignment can be found by logging into *CourseWare* at http://www.casa.uh.edu, selecting **Math 1432(13209)**, clicking on the **EMCF** tab at the top of the page, and selecting **EMCF18**.

Note: See the last page of Monday's notes for information about dents, inner loops and cardiods.

1. The polar curve $r = 3\cos(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.
2. The polar curve $r = -5\sin(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.
3. The polar curve $r = 3 - 2\cos(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.
4. The polar curve $r = 3 + 4\sin(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.
5. The polar curve $r = 3 - 3\sin(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.

6. The polar curve $r = 3 - 2\sin(\theta)$
    a. is a cardiod
    b. has an inner loop
    c. has a dent
    d. is a circle
    e. None of these.
7. The polar curve $r = 3\sin(4\theta)$
    a. is a flower with 2 petals
    b. is a flower with 3 petals
    c. is a flower with 4 petals
    d. is a flower with 5 petals
    e. None of these.
8. The polar curve $r = -5\sin(2\theta)$
    a. is a flower with 2 petals
    b. is a flower with 3 petals
    c. is a flower with 4 petals
    d. is a flower with 5 petals
    e. None of these.
9. The polar curve $r = 2\cos(3\theta)$
    a. is a flower with 2 petals
    b. is a flower with 3 petals
    c. is a flower with 4 petals
    d. is a flower with 5 petals
    e. None of these.
10. The polar curve $r = 3\sin(5\theta)$
    a. is a flower with 2 petals
    b. is a flower with 3 petals
    c. is a flower with 4 petals
    d. is a flower with 5 petals
    e. None of these.