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## 4-4 Unit Circle Project

Goal: To create a unit circle with all pertinent information to aid in memorization.
Instructions: You will create an artistic representation of the unit circle. It can be as small as a picture on an $8.5 \times 11$ " piece of paper or as large as you want it to be. You can bake your design and bring it in to class. You can draw it with chalk on your driveway and take a picture of it and bring it in to class. What needs to be included in the project are as follows:

- You must include all of the major angles in degrees and radians
- The coordinates of all the major points
- Tangent value of each angle
- Somewhere on paper: definition of cosine, sine and tangent relative to the unit circle
- It must be accurate: compasses, rulers, and protractors should be utilized
- Advanced: make a video of you making a unit circle from scratch. Include the link to the video as a QR code on your poster. See right
 for example.


## Unit Circle Derivation



Rubric

| A: Exceptional | Proficient Plus: Art is exceptional. QR code with link to your video. Video is <br> short and concise. |
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| B: Proficient | Data is accurate. Organization is clean. Degrees, radians and $(\cos \theta, \sin \theta)$ <br> coordinates. Art is creative. |
| C: Basic | Some missing data. Not clean. |
| D: Developing | Significant portions are missing from circle. |
| F: Inadequate | Incomplete by missing most information. |

