CONICS ARTWORK!
Some of the Project Requirements

Create a drawing/design on graph paper (cartoon character, sports object or mascot, design or a scene—BE CREATIVE!!). It should include (at least) the following 11 graphs (or pieces of graphs in your creation):

- a. 2 circles
- b. 2 horizontal or vertical ellipses (or 1 of each)
- c. 1 horizontal parabola
- d. 1 vertical parabola
- e. 1 horizontal or vertical hyperbola
- f. 2 lines
- g. any 2 more conic equations of your choice
### Grading Rubric:

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing</td>
<td>45</td>
</tr>
<tr>
<td>Equations</td>
<td>45</td>
</tr>
<tr>
<td>Creativity and Neatness</td>
<td>10</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
Some Examples of Projects!

- Begin with a sketch....
- Create something AMAZING!! 😊
EQUATIONS

1. \( \frac{x^2}{100} + \frac{y^2}{81} = 1 \)

2. \( \frac{x^2}{25} + \frac{y^2}{4} = 1 \)

3. \( (x-3)^2 + (y-5)^2 = 1 \)

4. \( (x+3)^2 + (y-5)^2 = 1 \)

5. \( y = \frac{1}{4}x^2 - 7 \)

CALCULATOR FORM

1. \( y = \pm \sqrt{81 - \frac{81}{100}x^2} \)

2. \( y = \pm \sqrt{4 - \frac{4}{25}x^2} \)

3. \( y = 5 \pm \sqrt{1 - (x-3)^2} \)

4. \( y = 5 \pm \sqrt{1 - (x+3)^2} \)

5. \( y = \frac{1}{4}x^2 - 7 \)