Match the following:

1. \( y = \frac{8}{x-3} \)
2. \( y = 5x \)
3. \( y = -5x \)
4. \( y = -5x^2 \)
5. \( y = \frac{|x-4|}{x-4} \)
6. \( x^2 + y^2 = 4 \)
7. \( y = \sqrt{x-4} \)
8. \( y = -x^5-x^2-3 \)
9. \( y = x^3 - 4x \)

Evaluate the following.

10. \( \sin 270^\circ \)
11. \( \sec \frac{3\pi}{2} \)
12. \( \tan \frac{2\pi}{3} \)

A V8 engine is coupled to a dynamometer and the horsepower \( y \) is measured at different engine speeds \( x \) is given in the table.

<table>
<thead>
<tr>
<th>( x )</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>( y )</td>
<td>40</td>
<td>85</td>
<td>140</td>
<td>200</td>
<td>225</td>
<td>245</td>
</tr>
</tbody>
</table>

Use the regression capabilities of the calculator to find a cubic model for the data.