Name _______________________________________

- Show sufficient work to justify each answer.
- No calculators, notes, books, etc allowed.
- You have 15 minutes for this quiz.

1. (3 points) Find a formula for an exponential function which fits the following data:

<table>
<thead>
<tr>
<th></th>
<th>0</th>
<th>-2</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>y</td>
<td>5/4</td>
<td>80</td>
<td>320</td>
<td></td>
</tr>
</tbody>
</table>

2. (3 points) Find the inverse function to

\[ f(x) = \ln \left( \frac{1 + 2x}{1 - 6x} \right) \]
3. (3 points) Solve the following for $x$:

$$\ln(2e^{4x+3}) = x$$

4. (1 point) Suppose $f$ is a one-to-one function, $f(3) = 7$, $f(7) = 2$, and $f(2) = 3$. What is $f^{-1}(2)$?