### Solve each problem.

Show your work and write your answers using scientific notation.

<table>
<thead>
<tr>
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<th>In one year, 30% of all the eggs consumed were egg products such as liquid or powdered eggs. If that 30% equaled $2.286 \times 10^9$ eggs, how many eggs altogether were consumed that year?</th>
<th>If food manufacturers produced three billion pounds of egg products each year, how much do they produce each month?</th>
<th>U.S. egg farmers produce about 79 billion eggs each year. If a hen on an egg farm lays 265 eggs a year, about how many egg-laying hens are there on U.S. egg farms?</th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
<td>3.</td>
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<td>4. How much would it cost if 40 egg inspectors worked 60 hours a week for two weeks? Each inspector earns $30.00 per hour.</td>
<td>If food manufacturers produced three billion pounds of egg products each year, how much do they produce each month?</td>
<td>How much of the protein avidin is there in 250 eggs?</td>
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<td>5. About 0.05% of an egg white is the protein avidin. How much of the protein avidin is there in 250 eggs?</td>
<td>If a commercial egg facility processed 18 million eggs in eight hours, how many eggs would it process each hour?</td>
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</table>

**Bonus:** Use the following data to write a problem with an answer that can be written in scientific notation.

- There are about 280 million egg-laying hens on U.S. egg farms.
- The 79 billion eggs produced in the United States each year make up about 10% of the world’s egg supply.
- We use about 60% of the 79 billion eggs as consumers.
- The foodservice industry uses about 9% of the 79 billion eggs.
Answer Key

1. $7.62 \times 10^{11}$
2. $2.5 \times 10^8$
3. $2.98 \times 10^8$
4. $1.44 \times 10^5$
5. $1.25 \times 10^{-1}$
6. $2.25 \times 10^6$

BONUS Problems and answers will vary.