



incredible!

American Egg Board

Grade 8

Name _____ Solving problems, using scientific notation (8.EE.A.4)

Eggsactly!

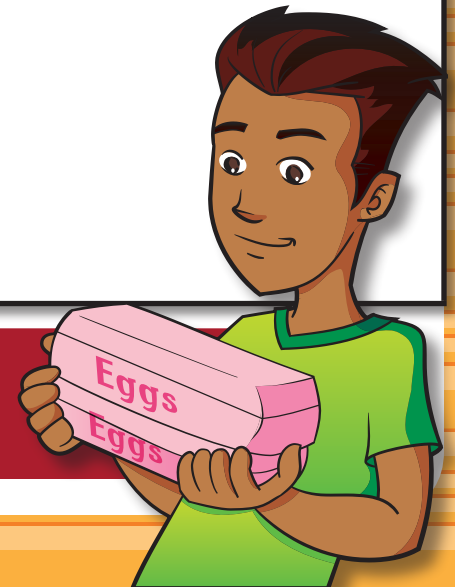


Solve each problem. Show your work and write your answers using scientific notation.

<p>1 In one year, 30% of all the eggs consumed were egg products such as liquid or powdered eggs. If that 30% equaled 2.286×10^{11} eggs, how many eggs altogether were consumed that year?</p>	<p>2 If food manufacturers produced three billion pounds of egg products each year, how much do they produce each month?</p>	<p>3 US 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 US egg farms?</p>
<p>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.</p>	<p>5 About 0.05% of an egg white is the protein avidin. How much of the protein avidin is there in 250 eggs?</p>	<p>6 If a commercial egg facility processed 18 million eggs in eight hours, how many eggs would it process each hour?</p>

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 US egg farms.
- We use about 60% of the 79 billion eggs as consumers.
- The 79 billion eggs produced in the United States each year make up about 10% of the world's egg supply.
- The foodservice industry uses about 9% of the 79 billion eggs.





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Answer Key for “Eggsactly!”

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

Bonus: Problems and answers will vary.