Factoring Cooties Game

Directions: Work through the problems as a group. (1 member can't do a problem while someone works on another problem.) When you have an answer – send a representative to check the answer with the Ms. Daniels. If the answer is correct, you will get a piece of your cootie. If not, you must go back and rework that answer before going on to another problem.

1. The product of two numbers is 640. Their difference is 12. Find these numbers.

2. One side of a rectangle is 3ft shorter than twice the other side. Find the sides if the area is 209ft^2.

3. The product of 2 consecutive odd numbers is 255. What are the numbers?

4. One side of a rectangle is 4in shorter than three times the other side. Find the sides if the area of the rectangle is 319in^2.

5. If we square a number, we get six times the number. Find all numbers with this property.

6. If we raise a number to the third power, we get four times the number. Find all numbers with this property.

7. The product of two consecutive even integers is 840. Find these numbers.

8. The area of a rectangle is 1260m^2. Find the dimensions of the rectangle if we know that one side is 48m longer than three times the other side.

9. A square and rectangle have the same area. The length of the rectangle is five inches more than twice the length of the side of the square. The width of the rectangle is 6 inches less than the side of the square. Find the length of the side of the square.

10. Andrew has 24 m of fencing to surround a garden, bounded on one side by the wall of his house. What are the dimensions of the largest rectangular garden that he can enclose?

11. A dealer sells CDs for $6 and usually sells 20. If he lowers the price by $2, he will increase sales by 8 CDs. How many does he have to sell to earn $96.