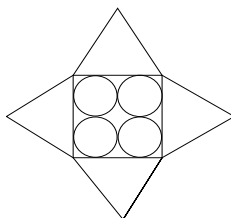


Math Awareness Week Competition 2008 Examination for 5th-6th Grades

DIRECTIONS: [40 Minutes - 5 Questions] Start each new problem on a separate page. **Show your work!** Answers must be exact. You are allowed to use a calculator. You are not allowed to borrow or interchange calculators during the test.

1. Is there a three-digit number that is equal to the product of its digits? Explain your answer.
2. There were 3 birds sitting on each of the branches of a tree and one other bird was flying above the tree. After some time all of these birds were sitting on the same tree but this time there were 4 birds on each branch and one of the branches was empty. How many birds were there and how many branches does the tree have?
3. The bases of four equilateral triangles are sides of a square. Four circles of radius 2 were inscribed in the square. What is the perimeter of the resulting four-corner star?



4. John spent \$100 and purchased 3 different kinds of sandwiches for a class party. There were ten times as many \$1 sandwiches as \$2 sandwiches and the rest were \$5 sandwiches. How many of each kind did he buy?
5. Andrew's father's age in years now is equal to Andrew's age in months when Andrew was 9 times younger than his dad. How old is the father now if it is known that Andrew is 26 years and 8 months younger than him?