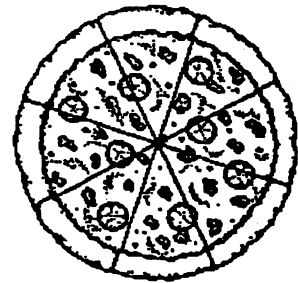# SUNSHINE MATH - 8
Pluto, XVIII

Name: _____

(This shows my own thinking.)

★★★★ 1. Use four 4's, grouping symbols (if needed), and any of the four operations to make all the numbers from 0 through 4.

     Answers :   0 = _____   1 = _____

                    2 = _____   3 = _____

                    4 = _____

★ 2. José is very hungry after doing his mathematics homework. He agrees to pay for $\frac{2}{3}$ of a pizza that he and Charlie ordered. The pizza cost $9.42. How much should José pay ?

Answer: _____

★★★★ 3. Marina works as a teller for the city bank. On a slow day she thought up the following problem:

Using pennies, nickels, and dimes, how many ways can you make change for a quarter?
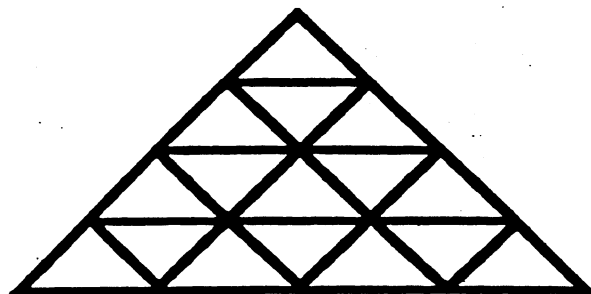
Help Marina find the answer.

      Answer: _____ ways

★★ 4. An engineer was working on a design for the electrical system in a new building and obtained a value of 728.57 meters for the length of some wiring. Round this to the nearest:

        a) tens
        b) units
        c) tenth

                            Answers :   a)_____
                                                   b)_____
                                                     c)_____

★　5. How many triangles in all?

Answer: _____ total triangles

★★　6. Write $0.\overline{4}$ (or 0.44444....) as a fraction in lowest terms.

Answer : _____

★★　7. All other factors being equal, a basketball team should win a game if its players are taller than the opposing team. The heights of Cobb Middle School's starting five are: 5'5"; 5'9"; 5'9"; 6'2" and 6'1". The heights of the starting five for Terraset Middle School are: 5'6"; 5'7"; 5'11"; 6'1", and 6'1". Which team should win because it has the tallest average height?

Answer : _____

★　8. With Easter approaching, the church needed to buy eggs for the big Easter Egg hunt. The secretary ordered *six dozen dozen* instead of what she was asked to order, *a half dozen dozen.* Did she order the right amount, or too many, or too few eggs?

Answer: _____

★★　9. A middle school that presently has 600 students has been growing at the rate of 23 students per year for the last decade, and this growth rate should continue for another decade. The student population (*P*) of the school *Y* years from now is given by this equation:

$$P = 600 + 23Y$$

a. How many students will the school have in 6 years? _____

b. How many students did the school have 5 years ago? _____