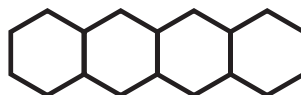# Warm-Up 2

11. _____ pieces   How many pieces that are exactly 5 inches long can Sue cut from a string that is 7 feet long?

12. _____ units   How many units away from the origin is the point $(-3, -4)$?

13. _____ tables   A hexagonal table that is by itself seats 6 people, one person at each side. A row of hexagonal tables is created by pushing together a certain number of hexagonal tables so that a side of one table meets a side of the next table, in the way shown here. If 50 people can sit at the row of tables that was created, how many tables are in the row?

14. _____ coins   In Oregon, which has no sales tax, Gloria bought three notebooks for $1.57 each. If she paid $5.00, what is the least number of U.S. coins that she could get in change?

15. _____ g

Fluorine
F

The mass of a fluorine atom is 3.16×10^{-23} g. What is the mass of 1,000,000,000 fluorine atoms? Express your answer in scientific notation to three significant figures.

16. _____ meals   A restaurant offers a dinner special in which diners can choose any one of 3 appetizers, any one of 4 entrées, any two different side dishes out of 5 and any one of 6 desserts. How many different meals are possible?

17. _____ minutes   It takes 15 machines 15 minutes to make 500 raviolis. The machines produce raviolis at a steady rate. How long would it take 75 of these machines to make 6000 raviolis?

18. _____   Four chips are distinctly labeled with the digits 2, 3, 1 and 7, one chip for each digit. Two chips are drawn at random without replacement and placed in the order in which they are drawn, from left to right, to form a two-digit number. What is the probability that the two-digit number is a prime number? Express your answer as a common fraction.

19. _____   The letters A, B, ... , Z are equally spaced in order on a number line, with A at 0 and Z at 25. What is the average of the two numbers that are 4 units from the letter M?

20. _____ units   On a coordinate grid, point B is located 8 units below and 2 units to the left of A(0, 6). What is the length of segment AB? Express your answer in simplest radical form.