Smiley Face Math   **Name:** _____
Grade 5, Worksheet II

☺ ☺ ☺   1. Find the missing number *x* in this equation: $3 + x = 17$.   Answer: $x =$ ___.
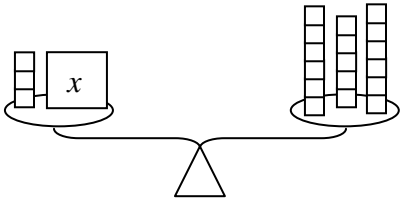
Explain how you can find the answer using the balance scale to the left. Each small square is 1 gram.

☺ ☺   2. a. Lauren is planning a poetry reading with her 5 friends. She only has 90 minutes after school. Each poet, including Lauren, will read for the same amount of time. How long will each poet read? _____ minutes

b. How can you check your answer to the problem above, using multiplication instead of division?

☺ ☺ ☺   3. Find the weight of each solid shape.

12   13   16
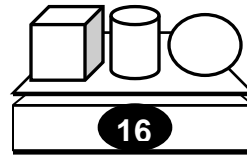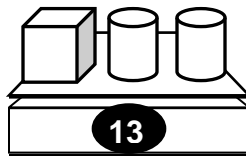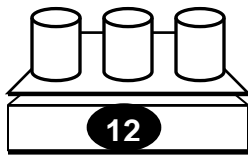
a cylinder weighs ___ pounds; a cube weighs ___ pounds; a sphere weighs ____ pounds

Explain how you found your answer:

☺ ☺ ☺   4. There are 127 students coming into 5th grade next year. Each classroom can hold up to 23 students.

      a. How many classrooms do they need? _____

      b. How many students would be in each class if the principal wanted all classes to be equal, or as close as possible? _____

      c. Explain your answer to (b) above. How did you decide?

☺ ☺ ☺ ☺   5. List the first 15 multiples of 3: _____

      List the first 10 multiples of 7: _____

      List the first 10 multiples of 6: _____

      What is the *least (smallest) common multiple* of 3, 7, and 6? _____

☺ ☺ ☺ ☺   6. An *exponent* tells you how many times to multiply a number by itself. The *exponent* is written on the right-hand side of the number, using a smaller number. For example, 2^4 means $2\times2\times2\times2$ and equals 16. So we say $2^4 = 16$. Write what these exponents mean, and find the value:

        a. 2^5 means _____ and so $2^5 =$ _____

        b. 3^2 means _____ and so $3^2 =$ _____

        c. 3^3 means _____ and so $3^3 =$ _____

        d. 3^4 means _____ and so $3^4 =$ _____