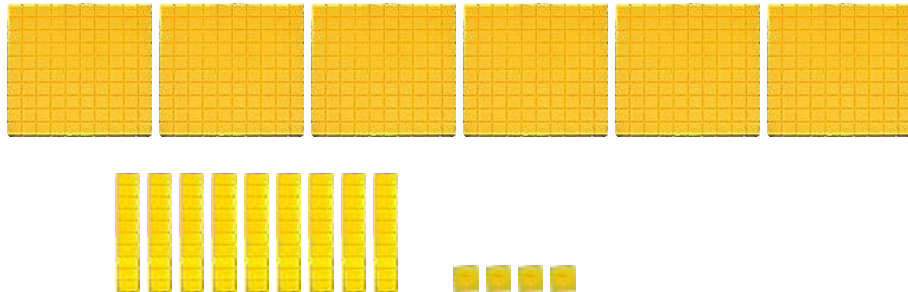


**Smiley Face Math**  
**Grade 5, Worksheet I**

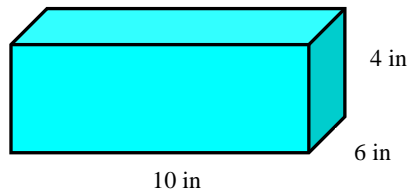
**Name:** \_\_\_\_\_



1. Show with the base ten blocks below that the quotient  $694 \div 3$  is  $231 \text{ r } 1$ .



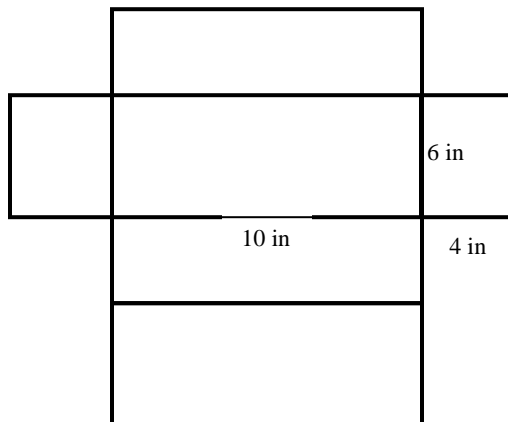
2. A typical adult shoe box from the store is 10 inches long by 6 inches wide by 4 inches high. What is the *volume* of such a shoe box, in cubic inches? I.e., how many cubes, 1 inch on a side, would fit inside the box?



Answer: \_\_\_\_\_ inches<sup>3</sup>



3. The *surface area* of a box is the area of a *net* that would cover the outside of the box, like wrapping paper. Label the dimensions of each face of the *net* for the box above, and find the total *surface area* of the six faces. (The *area* is how many 1-inch by 1-inch squares that would cover the outside surface.)



Answer: \_\_\_\_\_ inches<sup>2</sup>

- ☺ ☺ ☺ ☺ 4. Carson and his parents ordered pizza last night. They ordered a large pizza with tomatoes and onions. The cook cut the pizza into 12 equal slices. Carson ate  $\frac{1}{4}$  of the pizza, his father ate  $\frac{1}{3}$  of the pizza, and his mother ate  $\frac{1}{6}$  of the pizza.



- Write a fraction number sentence for the pizza they ate all together: \_\_\_\_\_
- Find the answer, as a fraction, for your number sentence: \_\_\_\_ of the pizza
- Write a fraction number sentence for the amount of pizza left: \_\_\_\_\_
- Find the answer, as a fraction, for your number sentence: \_\_\_\_ of the pizza.

- ☺ ☺ 5. B.J. Upton is building a batting cage in his backyard. He has to install a net all around it so that balls don't go into his neighbor's yards. The batting cage will be a rectangular shape 11.75 meters long and 9.25 meters wide. How much netting does Upton need to go completely around the batting cage? \_\_\_\_\_ meters

Explain how you found your answer: Draw a picture to help.



- ☺ ☺ ☺ ☺ 6. A *prime number* of tiles is one where, if you try to make rectangles from that number of tiles, you can only make a "1-by-that number" type of rectangle. For example, 7 is a *prime number* of tiles because you can only make a 1-by-7 rectangle from seven tiles. Experiment with these numbers of tiles and decide if they are *prime numbers* or not. Circle those that *are* prime.

6 tiles

11 tiles

12 tiles

13 tiles

- ☺ ☺ 7. If a fraction has a *prime number* as its denominator, then you can't find another name for the fraction with a smaller denominator. Circle the fractions below that have a *prime number* as the denominator:

$$\frac{4}{6}$$

$$\frac{4}{11}$$

$$\frac{8}{12}$$

$$\frac{6}{13}$$