I write the decimals (2.3 and

1.6) in unit form (23 tenths

and 16 tenths).

G5-IVI4-Lesson 18

1. Multiply using both fraction form and unit form.

a.
$$2.3 \times 1.6 = \frac{23}{10} \times \frac{16}{10}$$

$$=\frac{23\times16}{10\times10}$$

$$=\frac{368}{100}$$

$$= 3.68$$

2 3 tenths × 1, 6 tenths

1 3 8

+ 2 3 0

3 6 8 hundredths

I express the decimals (2.3 and 1.6) as fractions $(\frac{23}{10} \text{ and } \frac{16}{10})$, and then I multiply to get $\frac{368}{100}$, or 3.68.

I multiply the 2 factors as if they are whole numbers to get 368. The product's unit is hundredths because a tenth times a tenth is equal to a hundredth.

b.
$$2.38 \times 1.8 = \frac{238}{100} \times \frac{18}{10}$$

$$=\frac{238\times18}{100\times10}$$

$$=\frac{4,284}{1,000}$$

$$=4.284$$

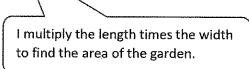
I express the decimals (2.38 and 1.8) in unit form (238 hundredths and 18 tenths).

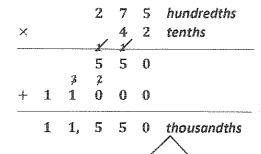
A hundredth times a tenth is a thousandth.

- 2. A flower garden measures 2.75 meters by 4.2 meters.
 - a. Find the area of the flower garden.

$$2.75 \text{ m} \times 4.2 \text{ m} = 11.55 \text{ m}^2$$

The area of the flower garden is 11.55 square meters.





A hundredth times a tenth is a thousandth.

$$\frac{1}{100} \times \frac{1}{10} = \frac{1 \times 1}{100 \times 10} = \frac{1}{1,000}$$

b. The area of the vegetable garden is one and a half times that of the flower garden. Find the total area of the flower garden and the vegetable garden.

11.55
$$m^2 \times 1.5 = 17.325 m^2$$

$$11.55 \text{ m}^2 + 17.325 \text{ m}^2 = 28.875 \text{ m}^2$$

I find the area of the vegetable garden by multiplying the flower garden's area by 1.5, or 15 tenths.

I add the 2 areas together to find the total area.

The total area of the flower garden and the vegetable garden is $28.875\ m^2$.