

## G5-M1-Lesson 11

1. Solve by drawing disks on a place value chart. Write an equation, and express the product in standard form.

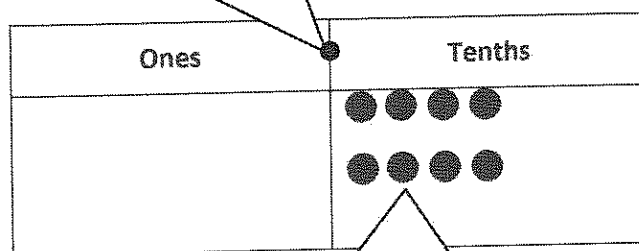
- a. 2 copies of 4 tenths

$$= 2 \times 0.4$$

$$= 0.8$$

2 copies means 2 groups. So, I'll multiply 2 times 4 tenths. The answer is 8 tenths, or 0.8.

I'll draw a place value chart to help me solve, and this dot is the decimal point.



Each dot represents 1 tenth, so I'll draw 2 groups of 4 tenths.

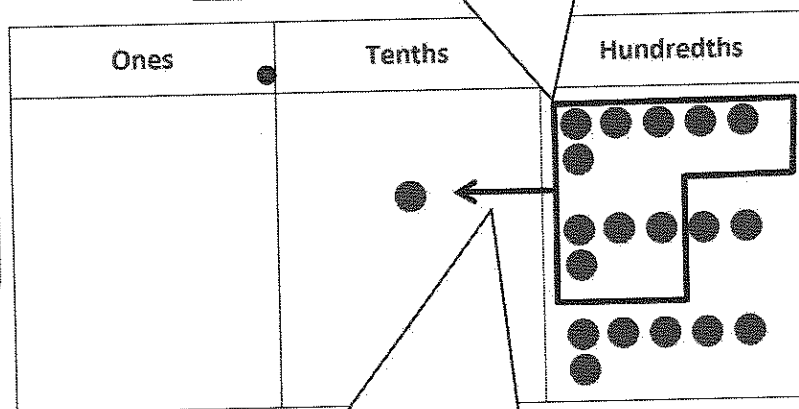
- b. 3 times as much as 6 hundredths

$$= 3 \times 0.06$$

$$= 0.18$$

I'll multiply 3 times 6 hundredths. The answer is 18 hundredths, or 0.18.

I'll draw 3 groups of 6 hundredths.



I'll bundle 10 hundredths and exchange them for 1 tenth.

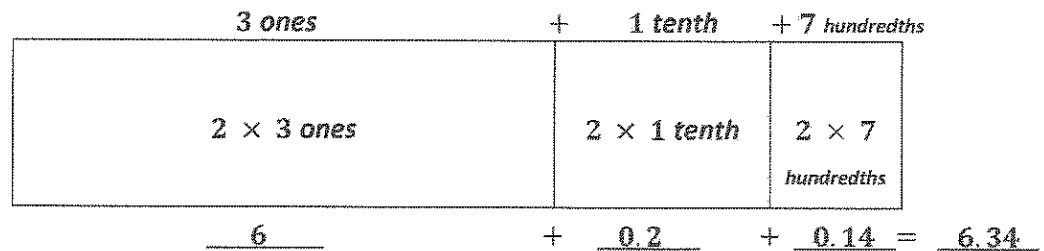
2. Draw an area model, and find the sum of the partial products to evaluate each expression.

a.  $2 \times 3.17$

3.17 is the same as 3 ones 1 tenth 7 hundredths.

The factor 2 represents the width of the area model.

The factor 3.17 represents the length of the area model.



I'll multiply 2 times each place value unit.

$$2 \times 3 \text{ ones} = 6 \text{ ones} = 6$$

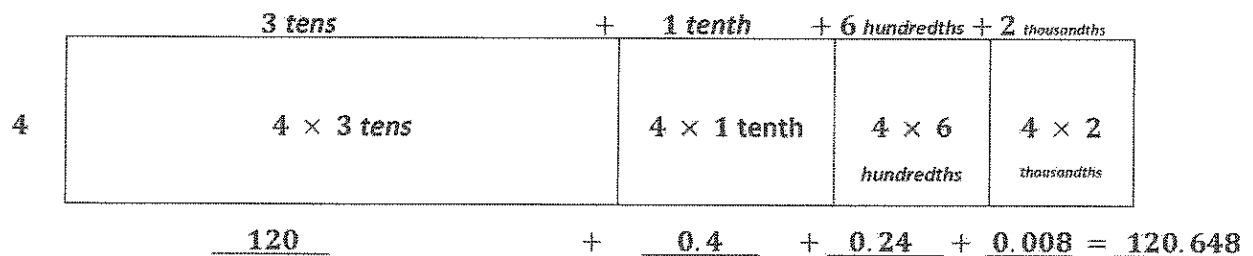
$$2 \times 1 \text{ tenth} = 2 \text{ tenths} = 0.2$$

$$2 \times 7 \text{ hundredths} = 14 \text{ hundredths} = 0.14$$

The product of 2 and 3.17 is 6.34.

b. 4 times as much as 30.162

There are 0 ones in 30.162, so my area model does not include the ones.



I'll multiply 4 times each place value unit.

$$4 \times 3 \text{ tens} = 12 \text{ tens} = 120$$

$$4 \times 1 \text{ tenth} = 4 \text{ tenths} = 0.4$$

$$4 \times 6 \text{ hundredths} = 24 \text{ hundredths} = 0.24$$

$$4 \times 2 \text{ thousandths} = 8 \text{ thousandths} = 0.008$$

The product of 4 and 30.162 is 120.648.