

G5-M1-Lesson 12

1. Choose the reasonable product for each expression. Explain your thinking in the spaces below using words, pictures, or numbers.

a. 3.1×3

930

93

9.3

0.93

3.1 is just a little more than 3. A reasonable product would be just a little more than 9.

$$3 \times 3 = 9. \text{ I looked for a product that was close to 9.}$$

b. 8×7.036

5.6288

56.288

562.88

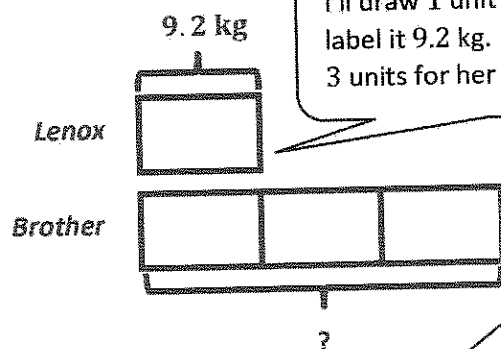
5,628.8

This product is not reasonable. How could 8×7.036 be less than both factors?

These 2 products are much too large.

$$8 \times 7 = 56. \text{ I looked for a product that was close to 56.}$$

2. Lenox weighs 9.2 kg. Her older brother is 3 times as heavy as Lenox. How much does her older brother weigh in kilograms?



I'll draw 1 unit for Lenox and label it 9.2 kg. Then I'll draw 3 units for her brother.

I can visualize an area model to solve 3×9.2 .

$$3 \times 9 \text{ ones} = 27 \text{ ones} = 27$$

$$3 \times 2 \text{ tenths} = 6 \text{ tenths} = 0.6$$

$$27 + 0.6 = 27.6$$

$$1 \text{ unit} = 9.2 \text{ kg}$$

$$3 \text{ units} = 3 \times 9.2 \text{ kg} \\ = 27.6 \text{ kg}$$

Lenox's older brother weighs 27.6 kilograms.

To find her brother's weight, I'll multiply Lenox's weight by 3. The answer is 27.6 kilograms.