

- 1.
- a. Sort the following expressions by rewriting them in the table.

The product is less than the boxed number:	The product is greater than the boxed number:

12.5

 × 1.989

828

 × 0.921

321.46

 × 1.26

0.007

 × 1.02

2.16

 × 1.11

0.05

 × 0.1

- b. What do the expressions in each column have in common?

2. Write a statement using one of the following phrases to compare the value of the expressions. Then, explain how you know.

*is slightly more than*    *is a lot more than*    *is slightly less than*    *is a lot less than*

a. 14 × 0.999 \_\_\_\_\_ 14

b. 1.01 × 2.06 \_\_\_\_\_ 2.06

c. 1,955 × 0.019 \_\_\_\_\_ 1,955

d. Two thousand  $\times 1.0001$  \_\_\_\_\_ two thousand

e. Two-thousandths  $\times 0.911$  \_\_\_\_\_ two-thousandths

3. Rachel is 1.5 times as heavy as her cousin, Kayla. Another cousin, Jonathan, weighs 1.25 times as much as Kayla. List the cousins, from lightest to heaviest, and explain your thinking.

4. Circle your choice.

a.  $a \times b > a$

For this statement to be true,  $b$  must be **greater than 1** **less than 1**

Write two expressions that support your answer. Be sure to include one decimal example.

b.  $a \times b < a$

For this statement to be true,  $b$  must be **greater than 1** **less than 1**

Write two expressions that support your answer. Be sure to include one decimal example.

## Answer Key

1. a. Less:  $828 \times 0.921$ ,  $0.05 \times 0.1$   
Greater:  $12.5 \times 1.989$ ,  $321.46 \times 1.26$ ,  
 $0.007 \times 1.02$ ,  $2.16 \times 1.11$   
b. Explanations will vary.
2. a. Is slightly less than; explanations will vary.  
b. Is slightly more than; explanations will vary.  
c. Is a lot less than; explanations will vary.  
d. Is slightly more than; explanations will vary.  
e. Is slightly less than; explanations will vary.
3. Kayla, Jonathan, Rachel; explanations will vary.
4. a. Greater than 1; examples will vary.  
b. Less than 1; examples will vary.