

Patterns-R-Us

A statistician is interested in finding out what pattern is created, if any, under certain situations. Your mission is to help come up with concrete rules for certain mathematical situations and operations. Record all of your work and explain your thinking so that you can defend your answers.

Pick a whole number to multiply and put it in the box		
X 1,000		
X 100		
X 10		

What is happening? _____

Is there a pattern? _____

Pick a decimal to multiply and put it in the box		
X 1,000		
X 100		
X 10		

What is happening? _____

Is there a pattern? _____

Pick a whole number to multiply and put it in the box		
X 0.1		
X 0.01		
X 0.001		

What is happening? _____

Is there a pattern? _____

Pick a decimal to multiply and put it in the box		
X 0.1		
X 0.01		
X 0.001		

What is happening? _____

Is there a pattern? _____

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0	What is happening? _____
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0	Is there a pattern? _____
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Pick a decimal to divide and put it in the box		
÷ 1,000		
÷ 100		
÷ 10		

What is happening? _____

Is there a pattern? _____

Pick a whole number to divide and put it in the box		
÷ 0.1		
÷ 0.01		
÷ 0.001		

What is happening? _____

Is there a pattern? _____

Pick a decimal to divide and put it in the box		
÷ 0.1		
÷ 0.01		
÷ 0.001		

What is happening? _____

Is there a pattern? _____

Explain all of the patterns that you are noticing. Be sure to be clear about different patterns when you multiply and divide. _____
