

Year 6- Try to solve these multiplying and dividing by 10, 100 and 1000 questions. Most of these questions will require your problem solving and reasoning skills so make sure you explain the answer when/if it asks you to do so.

Fill in the missing numbers in the diagram.



Multiplying by 1,000 is
the same as doing
 $10 \times 10 \times 10$



Do you agree with Mo?
Explain your answer.

Complete the table below. Draw it out and complete if not printing.

	$\times 10$	$\times 100$	$\times 1,000$
3.14			
13			
0.233			

If you multiply a number by 1,000, you can just divide the answer by 1,000 to get back to your original number.



Whitney



That's not true, you would need to divide the answer by ten three times.

Eva

Who do you agree with?
Explain your thinking.

Eva says,

When you divide by 10,
100 or 1,000 you just
take away the zeros or
move the decimal point.



Do you agree?
Explain why.

Can you find a path from 6 to 0.06?
You cannot make diagonal moves.

6	$\times 10$	$\times 10$	$\div 100$
$\div 10$	$\times 100$	$\times 100$	$\div 10$
$\times 10$	$\div 10$	$\div 1,000$	$\div 100$
$\div 1,000$	$\times 1,000$	$\times 100$	0.06

Is there more than one way?