For the function y=2x, fill in the table.

Starting	Ending	Starting	Ending	Average Rate
<i>x</i> ₁	<i>X</i> ₂	y_1	y_2	of Change <i>r</i>
-2	-1.5	-4	-3	2
-1.5	-1			
-1	-0.5			
-0.5	0			
0	0.5			
0.5	1			
1	1.5			
1.5	2			

Graph the average rate of change for each interval of x.

For the function $y=x^2$, fill in the table.

Starting	Ending	Starting	Ending	Average Rate
<i>X</i> ₁	<i>X</i> 2	y_1	<i>y</i> ₂	of Change <i>r</i>
-2	-1.5	4	2.25	3.5
-1.5	-1			
-1	-0.5			
-0.5	0			
0	0.5			
0.5	1			
1	1.5			
1.5	2			

Graph the average rate of change for each interval of x.

Write a function that relates the average rate of change to another column on the table.

For the function $y=3^x$, fill in the table.

Starting	Ending	Starting	Ending	Average Rate
<i>X</i> ₁	<i>X</i> ₂	y_1	y_2	of Change <i>r</i>
-4	-3	0.0123457	0.037037	0.0246914
-3	-2			
-2	-1			
-1	0			
0	1			
1	2			
2	3			
3	4			

Graph the average rate of change for each interval of x.

Write a function that relates the average rate of change to another column on the table.