

Name _____

Date _____

1. Complete the tables for the given rules.

Line ℓ

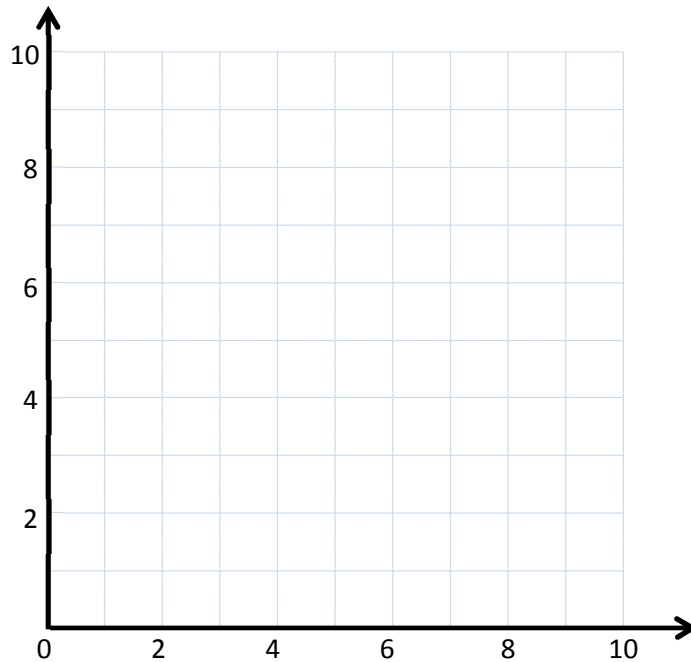
Rule: *Double x*

x	y	(x, y)
1		
2		
3		

Line m

Rule: *Double x , and then subtract 1*

x	y	(x, y)
1		
2		
3		



- Draw each line on the coordinate plane above.
- Compare and contrast these lines.
- Based on the patterns you see, predict what the line for the rule *double x , and then add 1* would look like. Draw your prediction on the plane above.

2. Circle the point(s) that the line for the rule *multiply x by $\frac{1}{2}$, and then add 1* would contain.

$(0, \frac{1}{2})$

$(2, 1\frac{1}{4})$

$(2, 2)$

$(3, \frac{1}{2})$

- Explain how you know.
- Give two other points that fall on this line.

3. Complete the tables for the given rules.

Line ℓ

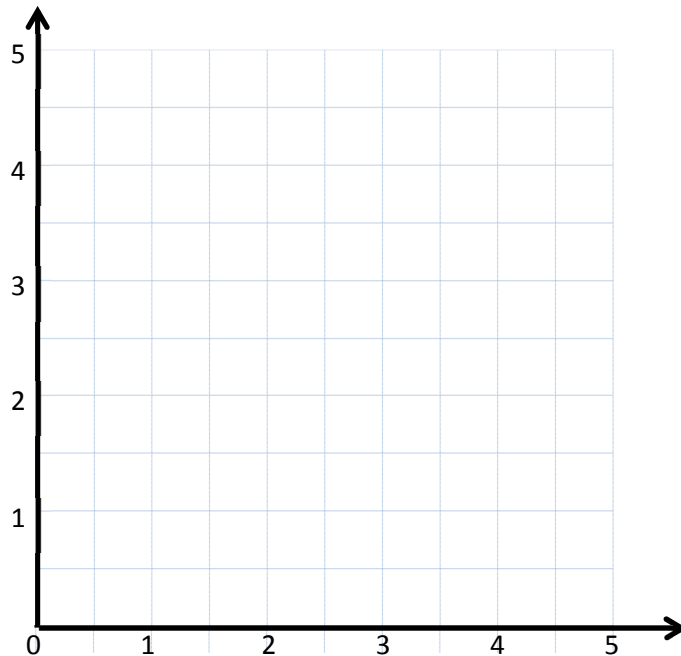
Rule: *Halve x , and then add 1*

x	y	(x, y)
0		
1		
2		
3		

Line m

Rule: *Halve x , and then add $1\frac{1}{4}$*

x	y	(x, y)
0		
1		
2		
3		



- Draw each line on the coordinate plane above.
- Compare and contrast these lines.
- Based on the patterns you see, predict what the line for the rule *halve x , and then subtract 1* would look like. Draw your prediction on the plane above.

4. Circle the point(s) that the line for the rule *multiply x by $\frac{3}{4}$, and then subtract $\frac{1}{2}$* would contain.

$(1, \frac{1}{4})$

$(2, \frac{1}{4})$

$(3, 1\frac{3}{4})$

$(3, 1)$

- Explain how you know.
- Give two other points that fall on this line.