

Name _____

Date _____

1. Complete the tables for the given rules.

Line ℓ

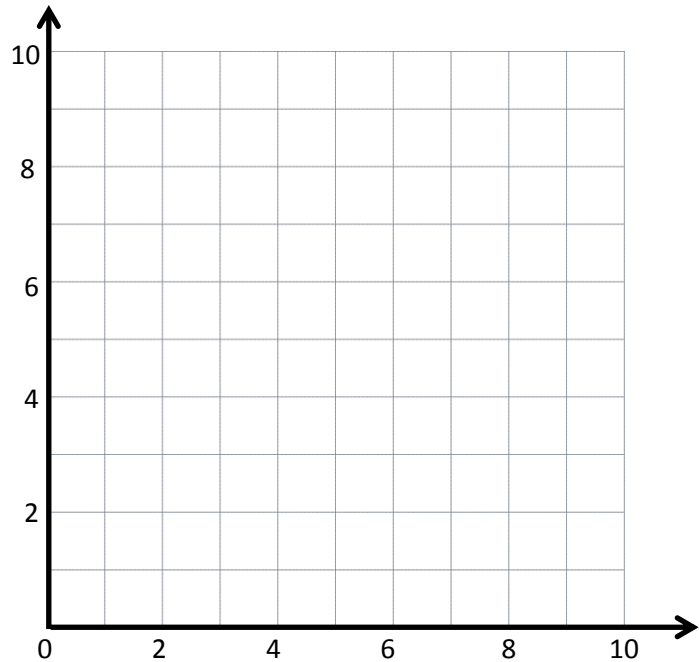
Rule: Double x

x	y	(x, y)
1		
2		
3		

Line m

Rule: Double x , then subtract 1

x	y	(x, y)
1		
2		
3		



- Draw each line on the coordinate plane above.
 - Compare and contrast these lines.
- c. Based on the patterns you see, predict what the line for the rule *double x , 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 by $\frac{1}{2}$ 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

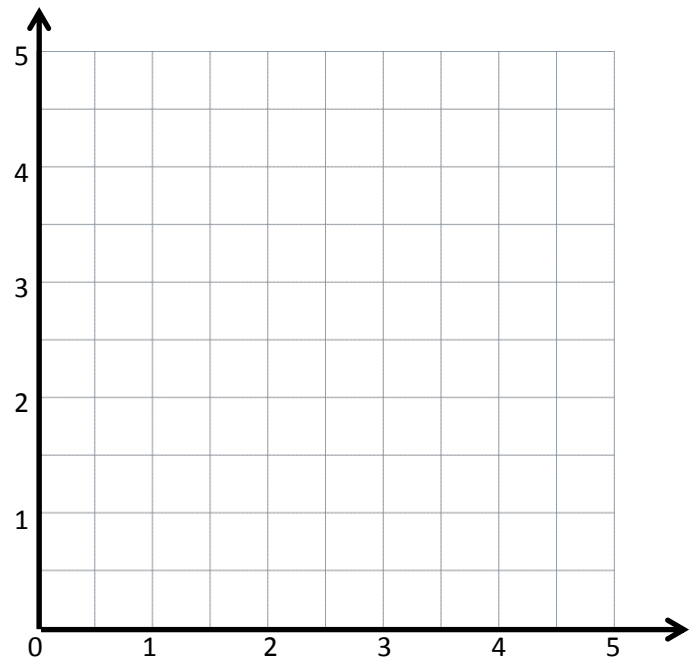
Rule: *Halve x , then add 1*

x	y	(x, y)
0		
1		
2		
3		

Line m

Rule: *Halve x , 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.
- c. Based on the patterns you see, predict what the line for the rule *halve x , then subtract 1* would look like. Draw your prediction on the plane above.
4. Circle the point(s) that the line for rule *multiply by $\frac{3}{4}$, 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.