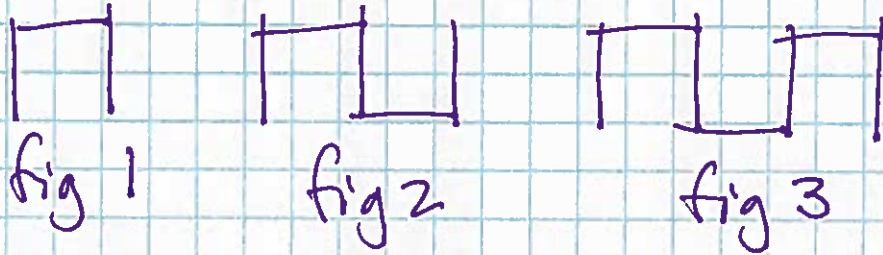


Algebra Study Guide pt 2.

1. 2 variable equations (linear Relationships)
look for the pattern: how does it grow?

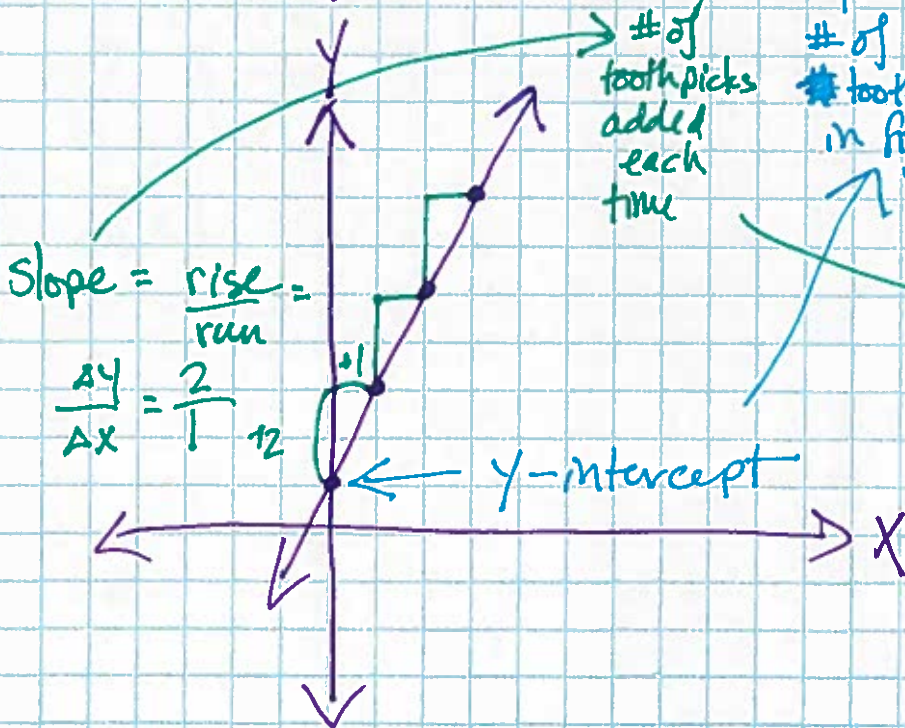


- * two toothpicks are added each time
- * fig 0 was only 1 toothpick \rightarrow subtract 2 toothpicks from fig 1

Organized info into a table:

equation: $y = 2x + 1$

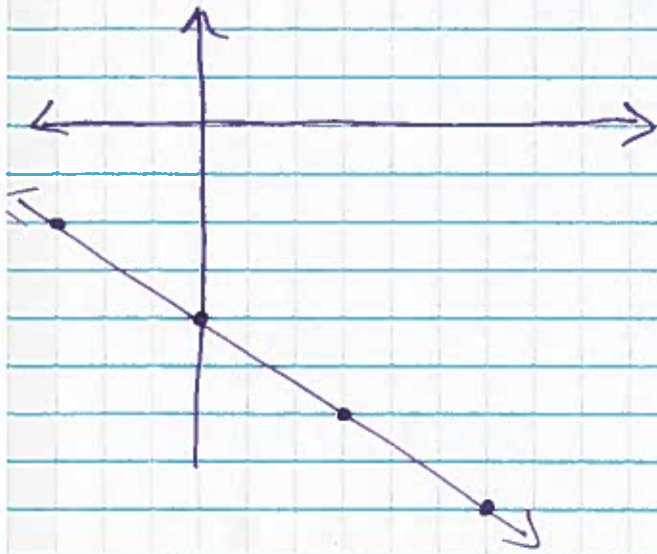
X	Y
fig #	# of toothpicks
0	1
+1	3
+1	5
+1	7



of toothpicks added each time

of toothpicks in fig 0

$$y = -\frac{2}{3}x - 4$$



1. Plot your y-intercept
2. Plot the next point by counting out the slope.

$$\text{slope} = \frac{\text{rise}}{\text{run}} = \frac{-2}{3} = \frac{2}{-3} \neq \frac{-2}{-3}$$

Make 3-4 points

3. Connect the points with a line + arrows.

$$y = m x + b$$

equation or explicit rule

Graph	$\frac{\text{rise}}{\text{run}}$	y-intercept
table	$\frac{\Delta y}{\Delta x}$	value of y when $x=0$
pattern with blocks	# added each time	# of blocks in fig. 0
	slope or recursive rule	