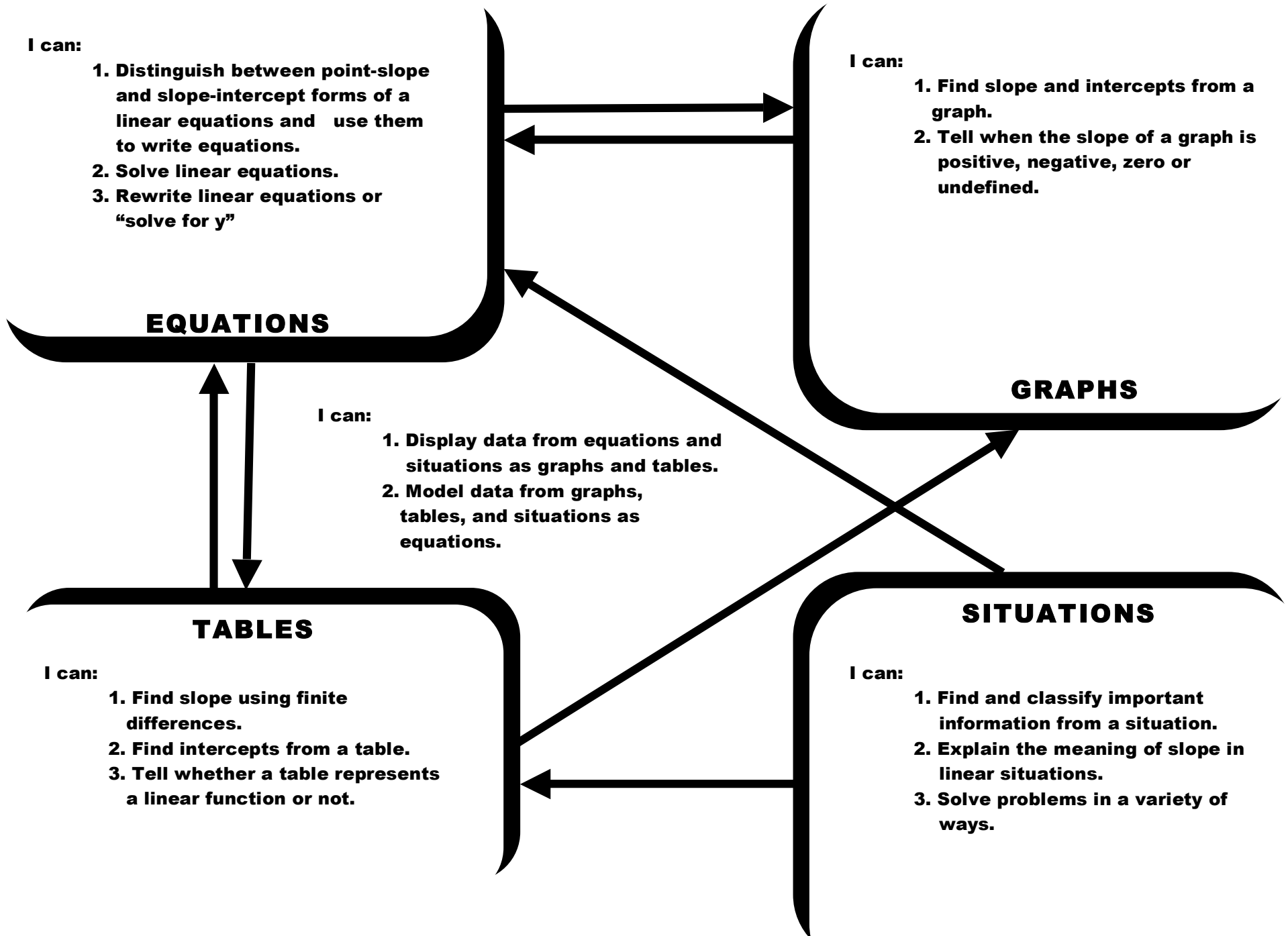


Linear Functions Goals



Study Guide

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EQUATIONS

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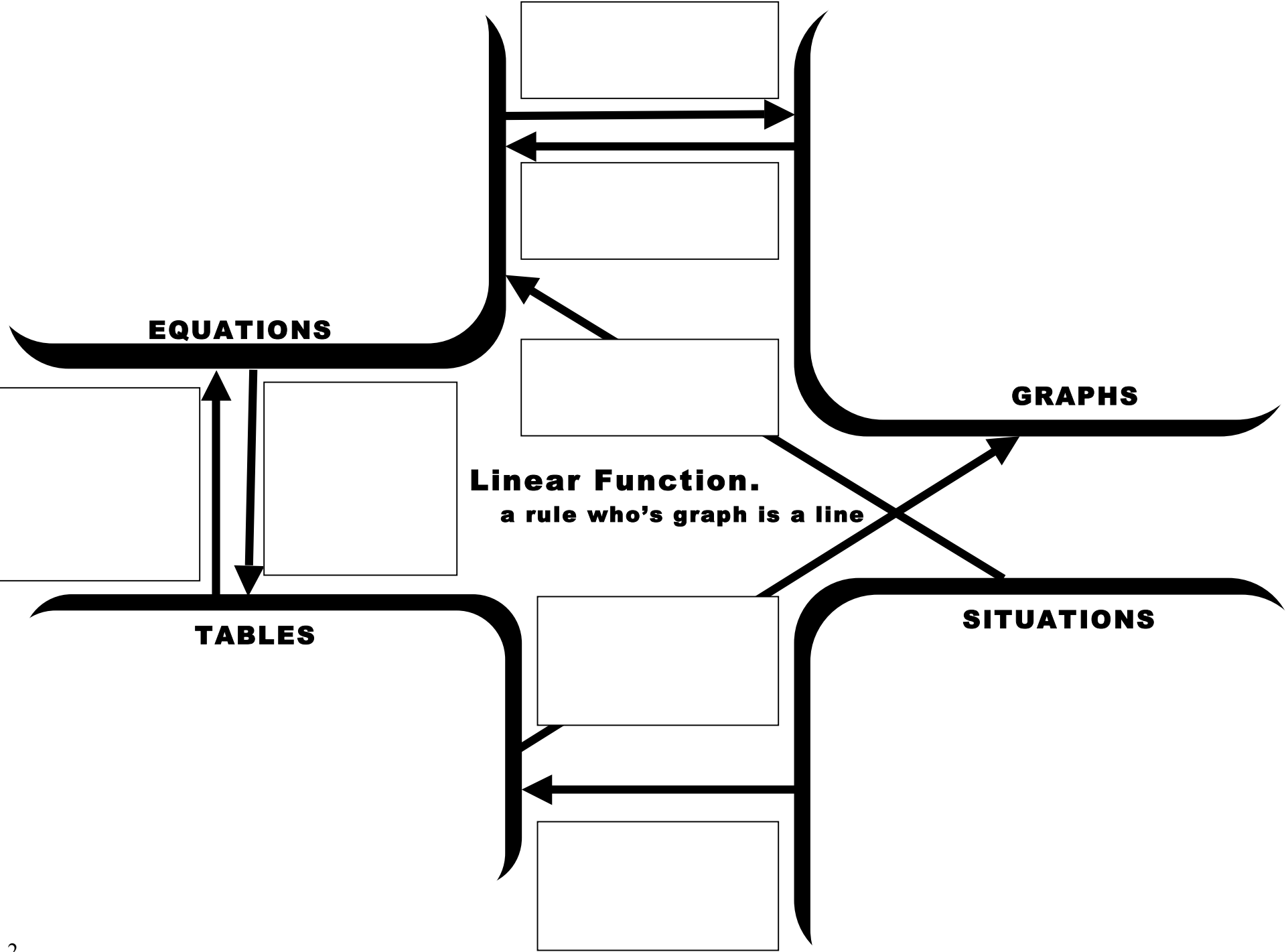
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TABLES

GRAPHS

Linear Function.
a rule who's graph is a line

SITUATIONS



Linear Functions

1. Starting from a Table

EQUATIONS

Notes:

TABLES

A table is a collection of ordered pairs.

x	y
-1	8
0	4
1	0
2	-4
-4	-8

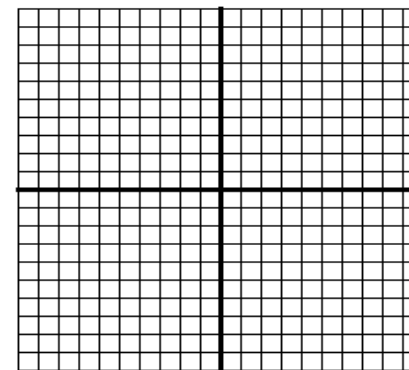
Domain: *All Real Numbers*

Range:

x-intercept:

y-intercept:

slope:



GRAPHS

Vocabulary

Domain:

Range:

Finite Differences:

Slope:

x-intercept:

y-intercept:

Big Questions

How do we know a table represents a linear function?

How do we find slope from a table? Intercepts?

Linear Functions

2. Starting from an Equation

$$Y = \frac{1}{2}X - 3$$

What is the form of this equation?

How do we know this is a linear equation?

Domain:

Range:

x-intercept:

y-intercept:

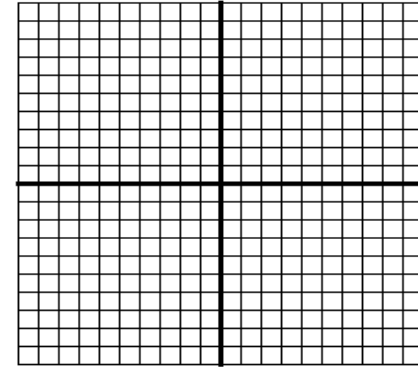
slope:

EQUATIONS

Notes:

TABLES

x	y



GRAPHS

Finding the x-intercept

Work

Finding the y-intercept

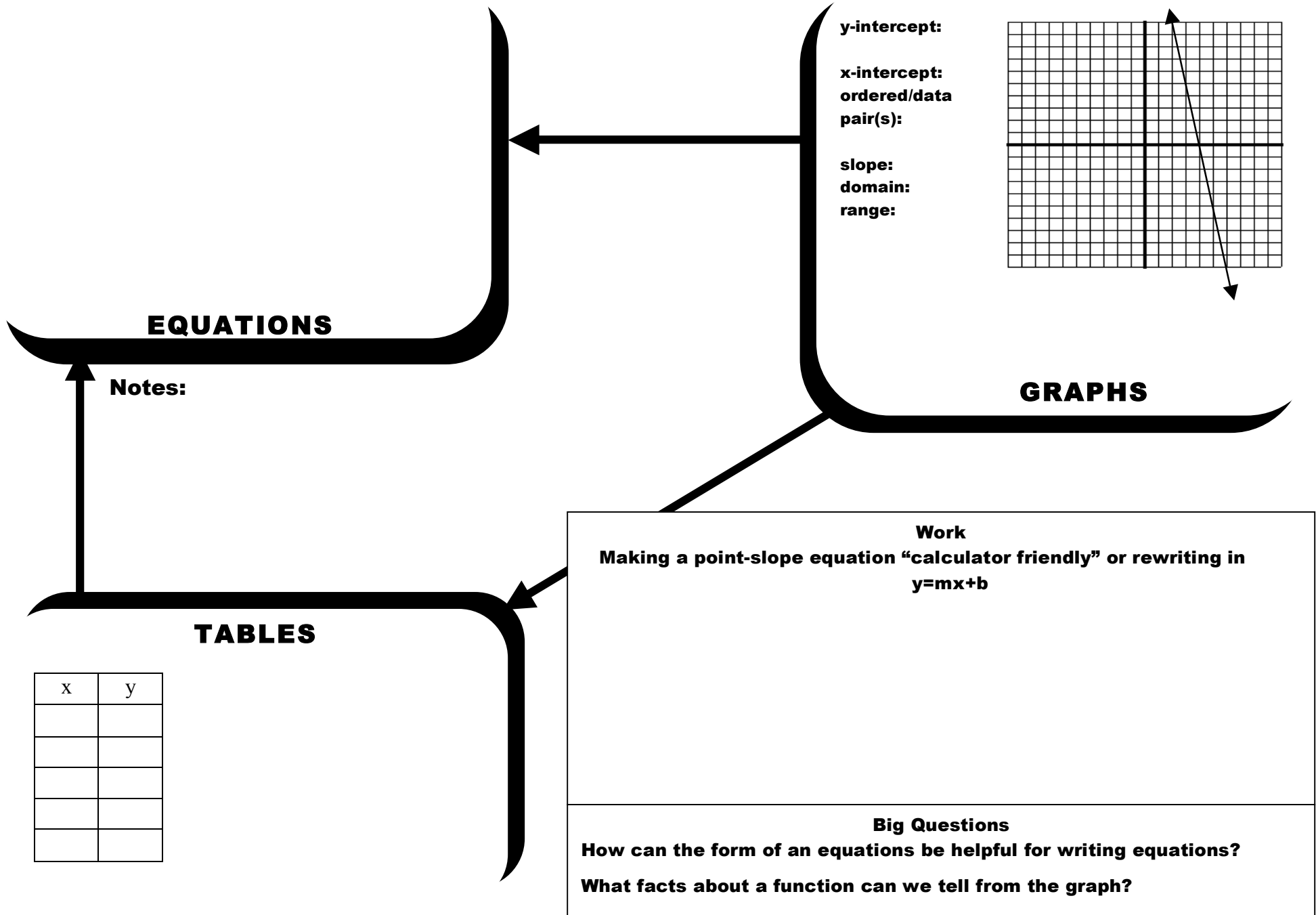
Big Questions

How can the form of an equations be helpful for graphing?

What facts about a function can we tell from the equation?

Linear Functions

3. Starting from a Graph



Linear Functions

4. Starting from a Situation 1

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EQUATIONS

Notes:

TABLES

	Show work to illustrate the pattern.	

Vocabulary

Rate of Change:

Initial Value:

Fixed Amount:

Variable Amount:

Verbal Model:

What-If Table:

Big Questions

How can we use verbal models and tables to write equations from situations?

How can we tell if a situation is linear?

SITUATIONS

Gym membership costs \$50 per month as well as a \$55 fee for enrolment and a \$10 per month child care fee. Write an equation that gives the total cost as a function of the number of months.

List all fixed amounts with labels.

List all unknown or variable amounts with labels.
Define the variables.

Linear Functions

5. Starting from a Situation 2

Work Space

EQUATIONS

Notes:

TABLES

Domain:

Range:

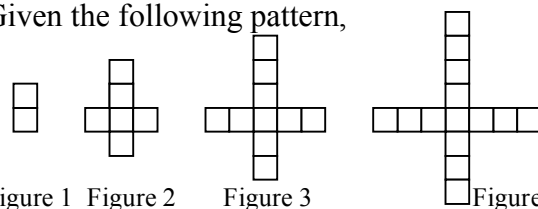
Is this situation linear?

Slope:

Data Pair:

SITUATIONS

Given the following pattern,



How many squares will there be in figure 100?
Which figure will have 118 squares?