Name: _____

_____
Class: _____
Date: _____

_____

Cups Concentrate	Cups Water	Total Cups Juice

Rivka bought orange juice concentrate. The instructions on the can say that for every 1 cup of concentrate, there should be 3 cups of water.   (Hint: Use the table to help you)

Part A:

Write the ratio of concentrate to water. _____

Write the ratio of water to concentrate. _____

Write the ratio of concentrate to juice. _____

Write the ratio of water to juice. _____

Write one part to part ratio.   _____

Write one part to whole ratio.   _____

Part B:

If Rivka needs to make 8 cups of juice, how many cups of concentrate does she need? How many cups of water?

8 cups juice   _____ cups water   _____ cups concentrate

What are two other amounts of juice Rivka could make using this ratio?

_____ cups juice _____ cups water   _____ cups concentrate

_____ cups juice _____ cups water   _____ cups concentrate

Name: _____

_____

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_____

Part C: Create a ratio table to show the different amounts of juice Rivka could make:

Water	3						45	
Concentrate	1	2						100
Juice	4			16				

Explain in words one strategy that you used to create the table.

_____

_____

_____

Part D:

What is a different ratio of concentrate to water that you could use to make the juice more "orangy"? _____

What is a different ratio of concentrate to water that you could use to make the juice less "orangy"? _____

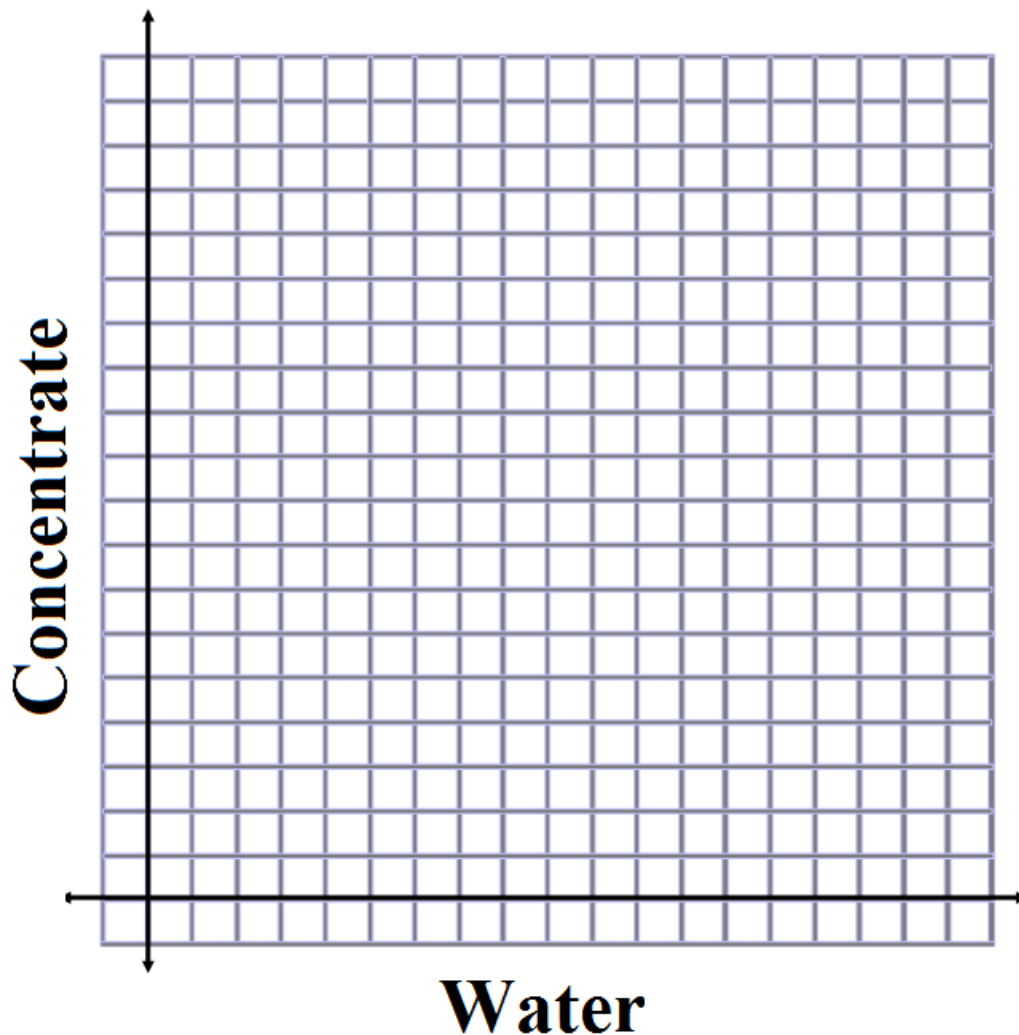Explain how you created ratios that are more/less "orangy" than 1 cup concentrate to 3 cups water. _____

_____

_____

Part E:

What is the rate of cups of concentrate per cup of water? _____

Explain how you used unit rates to figure out the answer. _____

_____

Part F: Use the ratio table you created in part C to graph the ratio of water (*x*) to orange juice concentrate (*y*). Then write an equation that relates the amount of water to the amount of concentrate.

Concentrate

Water

Equation / rule: _____

Rivka's friend Otto said that he preferred to mix 2 parts concentrate with 3 parts water.

a) Graph Otto's OJ mixture

b) Whose will taste more "orangey"? _____