

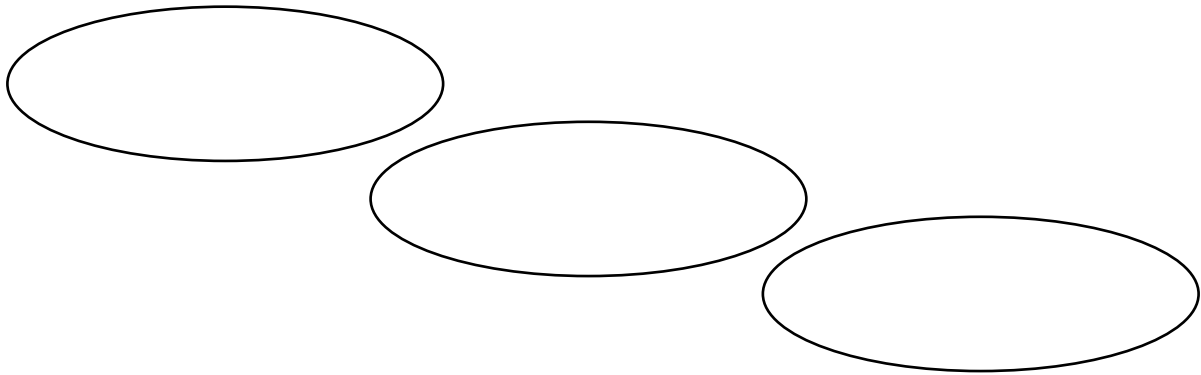
What's Essential in Math Intervention?

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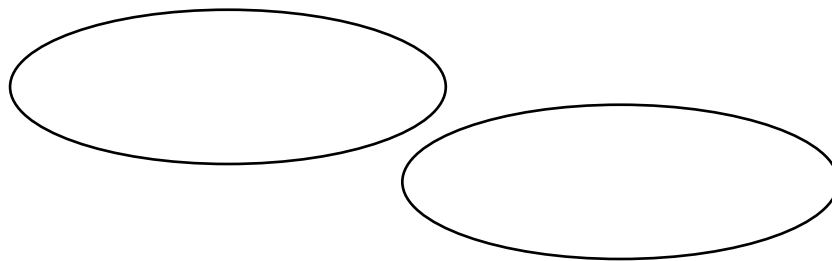
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Instructional Platform

Instructional Delivery



Instructional Strategies



Explicit Instruction

MODELING

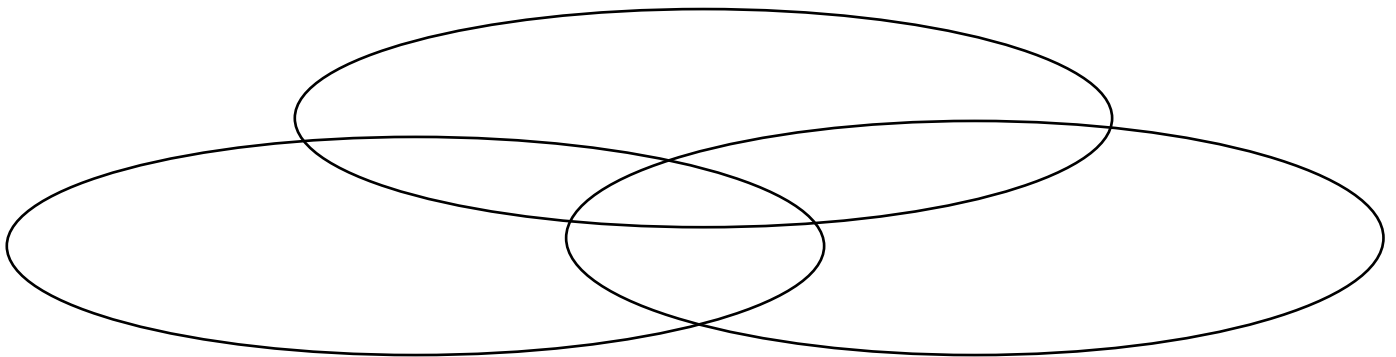
PRACTICE

SUPPORTS

Mathematical Language

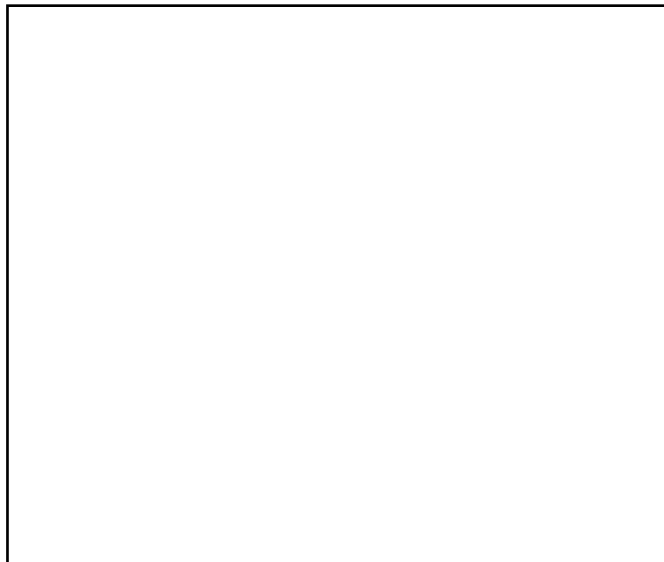
Instead of that...	Say this...

Multiple Representations

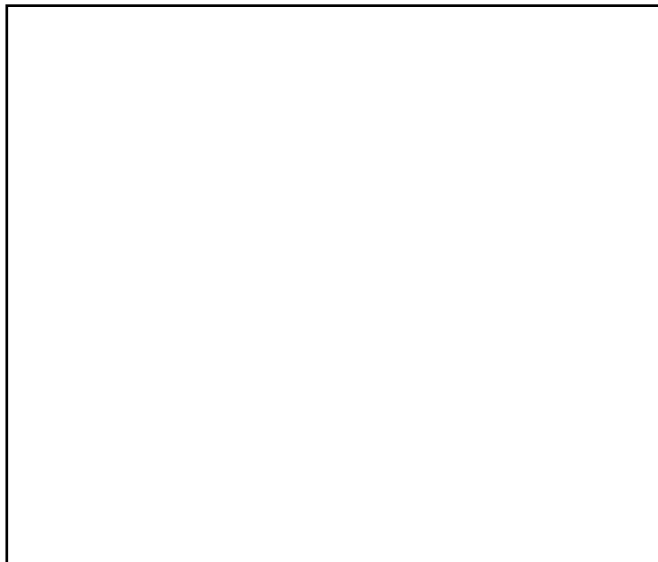


Fluency

Addition

A large, empty rectangular box intended for practicing addition problems.

Subtraction

A large, empty rectangular box intended for practicing subtraction problems.

Multiplication

A large, empty rectangular box intended for practicing multiplication problems.

Division

A large, empty rectangular box intended for practicing division problems.

Word-Problem Solving

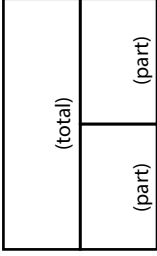
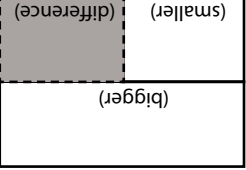
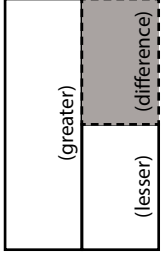
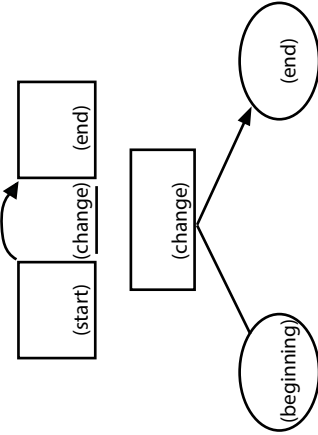
Attack Strategy

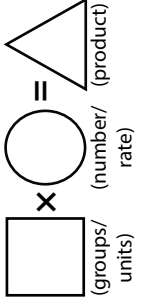
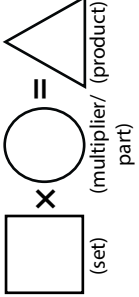
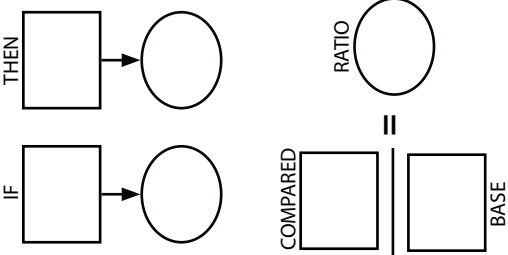
UPS✓
UNDERSTAND
Read and explain.

PLAN
How will you solve the problem?

SOLVE
Set up and do the math!

✓CHECK
Does your answer make sense?

Schema and Definition	Equations and Graphic Organizers	Examples	Variations
<p>Total (Combine; Part-part-whole)</p> <p>Parts combined for a sum</p>	<p>$P1 + P2 = T$ (part + part = total)</p> 	<p>Sum unknown: Lyle has 11 red apples and 18 green apples. How many apples does Lyle have altogether?</p> <p>Part unknown: Lyle has 29 red and green apples. If 11 of the apples are red, how many green apples does Lyle have?</p>	<p>More than two parts: Lyle has 34 apples. Of the apples, 11 are red, 18 are green, and the rest are yellow. How many yellow apples does Lyle have?</p>
<p>Difference (Compare)</p> <p>Sets compared for a difference</p>	<p>$B - s = D$ (bigger - smaller = difference)</p>  <p>$G - L = D$ (greater - less = difference)</p> 	<p>Difference unknown: Sasha wrote 85 words in her essay, and Tabitha wrote 110 words. How many fewer words did Sasha write than Tabitha?</p> <p>Bigger/greater unknown: Tabitha wrote 25 more words than Sasha. If Sasha wrote 85 words, how many words did Tabitha write?</p> <p>Smaller/lesser unknown: Tabitha wrote 110 words in her essay. Sasha wrote 25 words fewer than Tabitha. How many words did Sasha write?</p>	<p>(None)</p>
<p>Change (Join; Separate)</p> <p>An amount that increases or decreases</p>	<p>$ST +/ - C = E$ (start +/- change = end)</p> 	<p>End (increase) unknown: Jorge had \$52. Then, he earned \$16 babysitting. How much money does Jorge have now?</p> <p>Change (increase) unknown: Jorge had \$52. Then, he earned some money babysitting. Now, Jorge has \$68. How much did Jorge earn babysitting?</p> <p>End (decrease) unknown: Jorge had \$52. Then, he spent \$29 at the ballpark. How much money does Jorge have now?</p> <p>Change (decrease) unknown: Jorge had \$52 but spent some money when he went to the ballpark. Now, Jorge has \$23. How much did Jorge spend at the ballpark?</p> <p>Start (increase) unknown: Jorge has some money, and then he earned \$16 for babysitting. Now, Jorge has \$68. How much money did he have to start with?</p> <p>Start (decrease) unknown: Jorge had some money. Then, he spent \$29 at the ballpark and has \$23 left. How much money did Jorge have before going to the ballpark?</p>	<p>Multiple changes: Jorge had \$78. He stopped and bought a pair of shoes for \$42 and then he spent \$12 at the grocery. How much money does Jorge have now?</p>

Schema and Definition	Graphic Organizers	Examples	Variations
<p>Equal Groups (Vary)</p> <p>A number of equal sets or units</p>		<p>Product unknown: Maria bought 5 cartons of eggs with 12 eggs in each carton. How many eggs did Maria buy?</p> <p>Groups unknown: Maria bought 60 eggs. The eggs were sold in cartons with 12 eggs each. How many cartons of eggs did Maria buy?</p> <p>Number unknown: Maria bought 5 cartons of eggs for a total of 60 eggs. How many eggs were in each carton?</p>	<p>With rate: Maria bought 5 cartons of eggs. Each carton cost \$2.95. How much did Maria spend on eggs?</p>
<p>Comparison</p> <p>One set as a multiple or part of another set</p>		<p>Product unknown: Malik picked 7 flowers. Danica picked 3 times as many flowers. How many flowers did Danica pick?</p> <p>Set unknown: Danica picked 3 times as many flowers as Malik. If Danica picked 21 flowers, how many flowers did Malik pick?</p> <p>Times unknown: Malik picked 7 flowers. Danica picked 21 flowers. How many times more flowers did Danica pick?</p>	<p>With fraction: Malik picked 25 red and yellow flowers. If 1/5 of the flowers were yellow, how many were red?</p>
<p>Proportions</p>		<p>Subject unknown: Sally typed 56 words in 2 minutes. How many words could Sally type in 7 minutes?</p> <p>Object unknown: Sally typed 56 words in 2 minutes. How many minutes would it take Sally to type 192 words?</p> <p>Base unknown: Justin baked cookies and brownies. The ratio of cookies to brownies was 3:5. If he baked 15 cookies, how many brownies did he bake?</p> <p>Compared unknown: Justin baked cookies and brownies. The ratio of cookies to brownies was 3:5. If he baked 25 brownies, how many cookies did he bake?</p> <p>Ratio unknown: Justin baked 15 cookies and 25 brownies. What's the ratio of cookies to brownies?</p>	<p>With percentage: Watson received an 80% on his science quiz. If the test had 40 questions, how many questions did Watson answer correctly?</p> <p>With unit rate: Paula bought 5 boxes of markers. She spent \$9.75. What is the price of one box of markers?</p>