Strategy Detective

Your Challenge

You have been learning strategies for addition and subtraction. The following problem has been solved in four different ways.

- 1. Investigate how the problem has been solved each time.
- **2.** Use numbers, pictures, and words to explain on the **Recording Sheet** how or why each of these strategies work.

46 + 39 =

Strategy 1:

$$40 + 30 = 70$$

$$6 + 9 = 15$$

$$70 + 15 = 85$$

Strategy 2:

$$46 + 4 = 50$$

$$39 - 4 = 35$$

$$50 + 35 = 85$$

Strategy 3:

$$46 + 4 = 50$$

$$39 + 1 = 40$$

$$50 + 40 = 90$$

$$4 + 1 = 5$$

$$90 - 5 = 85$$

Strategy 4:

$$46 - 6 = 40$$

$$39 - 9 = 30$$

$$40 + 30 = 70$$

$$6 + 9 = 15$$

$$70 + 15 = 85$$

Strategy Detective

46 + 39 =

Strategy 1	Strategy 2
Strategy 3	Strategy 4

Finding the Balance

Your Challenge

You worked on addition and subtraction strategies. Now it's time put them to use as you make sums and differences that equal the same amount. Be sure to show how you thought about each equation using words, pictures, and/or numbers.

Find the balance by making the equation true on each balance board.

- **1.** For each equation on the **Recording Sheet** use two-digit numbers that do not have a zero for the ones digit.
- 2. You cannot use a number more than once in each equation.
- **3.** You can use words, drawings, and/or numbers to show why the equation is balanced.

Example

Finding the Balance

Navigating on a Number Chart

Your Challenge

Follow the clues. Where do you end up?

301	302	303	304	305	306	307	308	309	310
311	312	313	314	315	316	317	318	319	320
321	322	323	324	325	326	327	328	329	330
331	332	333	334	335	336	337	338	339	340
341	342	343	344	345	346	347	348	349	350
351	352	353	354	355	356	357	358	359	360
361	362	363	364	365	366	367	368	369	370
371	372	373	374	375	376	377	378	379	380

Example:

Start on 314

Add 40. 314 + 40 = 354

Add 20. 354 + 20 = 374

Subtract 70. 374 - 70 = 304

Where are you? 304

Use this chart with the clues on the **Recording Sheet**.

Find which number you end up on each time.

Record on the **Recording Sheet** the steps you took.

Navigating on a Number Chart

Use the chart on the first page. Follow the clues for each problem. How did you get there? Record your moves.

Start on 315.	
Add 5.	
Add 50.	
Subtract 30.	
Where are you?	
Start on 328.	
Use exactly 5 moves to land on 358.	
Start on 365.	
Use exactly 5 moves to land on 303.	

Least Difference

Your Challenge

For each turn, use each digit card only once.

- 1. On the Recording Sheet, make 2 three-digit numbers.
- 2. Find the difference between the two numbers.
- **3.** Make 2 more three-digit numbers and find the difference.
- **4.** Each turn, try and make the difference less than the turn before.
- 5. What is the least difference you can find?
- **6.** Explain your strategy for finding the least difference.



Least Difference

_____ _ _ _ _ _ = ____

_____ _ __ = ____

_____ _ _ _ _ = ____

_____ = ____

_____ = ____

_____ = ____

_____=__

Least difference I found: _____

My strategy for finding the least difference: