## **Determining Differences Using Mental Strategies**

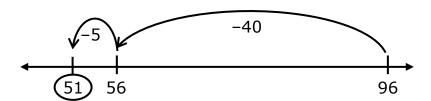
Melanie and Kareen each determined the difference of 96 – 45 and justified their answers as shown.

Melanie	Kareen
96 – 45	96 – 45
(90+6)-(40+5) $50+1$	(90+6)-45 $50-1$
51	49

I decomposed the numbers to solve the problem. I subtracted the numbers by place value. Then I added the differences for the answer.

I decomposed the numbers to solve the problem. Then I subtracted the differences because it is a subtraction problem.

Melanie disagreed with Kareen and justified her answer using a number line:



Melanie further explained:

When you decompose the numbers to solve, you need to compose the differences to determine the answer.

How are the strategies used by the students similar? How are they different?

- Determine each difference using a mental strategy.
- Use a number line to justify each answer.
- Write an explanation of your answer.

**1** 65 – 32

**2** 53 – 12

**3** 86 – 24

**4** 77 – 33