The Relationship of Addition and Subtraction

1. Draw tape diagrams to represent each of the following number sentences.

a.
$$3+5-5=3$$

b.
$$8-2+2=8$$

2. Fill in each blank.

a.
$$65 + \underline{\hspace{1cm}} -15 = 65$$

b.
$$_{---} + g - g = k$$

c.
$$a + b - \underline{\hspace{1cm}} = a$$

d.
$$367 - 93 + 93 =$$

1. Fill in each blank.

a.
$$\underline{} + 15 - 15 = 21$$

b.
$$450 - 230 + 230 =$$

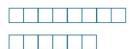
2. Why are the equations w - x + x = w and w + x - x = w called identities?

1. Draw a series of tape diagrams to represent the following number sentences.

a.
$$3+5-5=3$$



8 - 2 + 2 = 8



2. Fill in each blank.

a.
$$65 + \underline{} - 15 = 65$$

15

b.
$$_{--} + g - g = k$$

d.
$$367 - 93 + 93 =$$

367

Fill in each blank.

a.
$$_{--}+15-15=21$$

21

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450

$$__+15-15=21$$
 b. $450-230+230=__$ c. $1289-__+856=1289$

856

Why are the equations w - x + x = w and w + x - x = w called identities?

Possible answer: These equations are called identities because the variables can be replaced with any numbers, and after completing the operations, I returned to the original value.