

Chef's Soup - Student Task

1. Each of the problems below describes an action taken by the chefs. Figure out how the temperature would change overall in each of these situations and write an expression to describe the action and the overall result.

- a. Three cold cubes were added and five hot cubes were added.
- b. Six hot cubes were added and eight cold cubes were added.
- c. Nine cold cubes were added and two more cold cubes were added.
- d. Ten cold cubes were added and six cold cubes were removed.
- e. Five hot cubes were added and four cold cubes were removed.
- f. Twelve hot cubes were added and seven cold cubes were removed.

2. Describe an action (similar to the word problems above) involving hot or cold cubes that is represented by each of the following arithmetic expressions and state how the temperature would change overall.

$+23 + (+5)$	$-9 + (+3)$	$-8 - (-5)$	$-9 - (-6)$
$+3 + (-7)$	$+5 - (-1)$	$-9 - 5$	$10 + (-6)$
$-4 + (-10)$	$-6 + 4$	$+13 - (+5)$	$10 + 5$