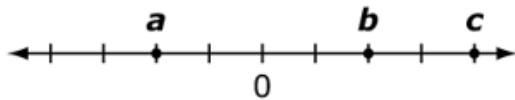


Smarter Balanced Assessment Item Illustrating 7.NS.A.1

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Values for variables a , b , and c are graphed on the number line shown.



Use the graph to evaluate the expressions in the table. Select one column for each row in the table to indicate whether the expression is less than 0, equal to 0, or greater than 0.

Expression	< 0	= 0	> 0
$a - b$			
$a + b$			
$b - c$			
$c - a$			
$a + c$			

Answer Key

(shown at right)

Expression	< 0	= 0	> 0
$a - b$			
$a + b$			
$b - c$			
$c - a$			
$a + c$			

Elaboration on Alignment

A key phrase in standard 7.NS.A.1 is “apply and extend previous understandings.” Using variables to represent the values on the number line ensures that the item is focused on understanding the operations instead of merely memorizing rules for computation as students extend this work to include rational numbers. The number line is used consistently as a representation in new assessment items, starting in grade 3.

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