

Writing task 1 - B

Grade 9

chapter 11

Name: _____

State the property that justifies each statement.

- If $5 = x$, then $x = 5$
- $a - 15 = 5$, then $a = 20$
- If $m\angle 4 = m\angle 6$, and $m\angle 6 = m\angle 7$, then $m\angle 4 = m\angle 7$

Q2) complete the two-column proof. Drag and drop the correct answer.

Given: $0 = \frac{5x+1}{2} - 8$

prove: $x = 3$

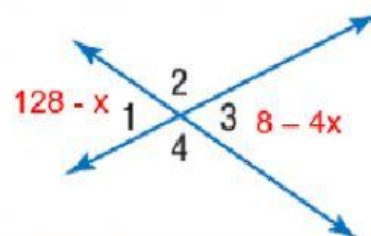
Symmetric Given multiplication subtraction division substitution addition

statement	reason
$0 = \frac{5x+1}{2} - 8$	
$8 = \frac{5x+1}{2}$	Property of equality
$2(8) = 5x + 1$	Property of equality
$16 = 5x + 1$	Property of equality
$15 = 5x$	Property of equality
$3 = x$	Property of equality
$x = 3$	Property of equality

Q3) complete the two-column proof. Drag and drop the correct answer.

Given: $m\angle 1 = 128 - x$, and $m\angle 3 = 8 - 4x$ Prove: $x = -40$

Given substitution definition of vertical angles subtraction
definition of congruence addition division symmetric



statement	reason
$m\angle 1 = 128 - x$, and $m\angle 3 = 8 - 4x$	
$\angle 1 \cong \angle 3$	
$m\angle 1 = m\angle 3$	
$128 - x = 8 - 4x$	
$128 = 8 - 3x$	Property of equality
$120 = -3x$	Property of equality
$-40 = x$	Property of equality
$x = -40$	Property of equality