Writing task 1 - C

Grade 9 chapter 11 Name:

State the property that justifies each statement.

a. If x = y, and y = z, then x = z
b. 2x = 2, then x = 1
c. If m∠4 = m∠6 , then m∠6 = m∠4

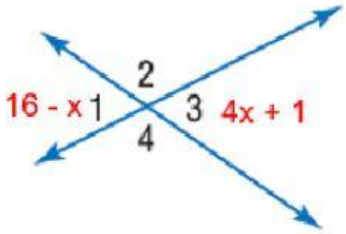
Q2) complete the two-column proof. Drag and drop the correct answer.

Given: $32 = \frac{8-3x}{4}$ prove: $x = -40$

Symmetric Given multiplication subtraction division substitution

statement	reason
$\mathbf{32 = \frac{8-3x}{4}}$	
4(32) = 8 – 3x	Property of equality
128 = 8 – 3x	Property of equality
120 = -3x	Property of equality
-40 = x	Property of equality
$\boldsymbol{x = -40}$	Property of equality

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



Given: m∠1 = 16 - x, and m∠3 = 4x + 1 Prove: x = 3

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

statement	reason
m∠1 = 16 - x, and m∠3 = 4x + 1	
∠1≅ ∠3	
m∠1 = m∠3	
16 - x = 4x + 1	
16 = 5x + 1	Property of equality
15 = 5x	Property of equality
3 = x	Property of equality
X = 3	Property of equality

LIVEWORKSHEETS