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 $m\angle 4 = m\angle 6$, then $m\angle 6 = m\angle 4$

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

Given: $32 = \frac{8-3x}{4}$ prove: $x = -40$
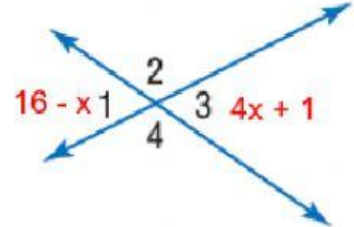
Symmetric   Given   multiplication   subtraction   division   substitution

statement	reason
$32 = \dfrac{8 - 3x}{4}$	[ ]
$4(32) = 8 - 3x$	[ ] Property of equality
$128 = 8 - 3x$	[ ] Property of equality
$120 = -3x$	[ ] Property of equality
$-40 = x$	[ ] Property of equality
$x = -40$	[ ] Property of equality

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

Given: $m\angle 1 = 16 - x$, and $m\angle 3 = 4x + 1$ Prove: $x = 3$

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

statement	reason
$m\angle 1 = 16 - x$, and $m\angle 3 = 4x + 1$	[ ]
$\angle 1 \cong \angle 3$	[ ]
$m\angle 1 = m\angle 3$	[ ]
$16 - x = 4x + 1$	[ ]
$16 = 5x + 1$	[ ] Property of equality
$15 = 5x$	[ ] Property of equality
$3 = x$	[ ] Property of equality
$X = 3$	[ ] Property of equality