Writing task 1 - B

Grade 9   chapter 11   Name:

State the property that justifies each statement.

a. If 5 = x, then x = 5
b. a - 15 = 5, then a = 20
c. 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.

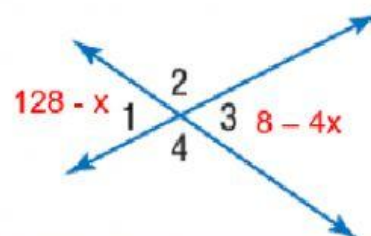Given: $0 = \frac{5x+1}{2} - 8$ prove: $x = 3$

Symmetric   Given   multiplication   subtraction   division   substitution   addition

statement	reason
$0 = \dfrac{5x+1}{2} - 8$	[ ]
$8 = \dfrac{5x+1}{2}$	[ ] 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