

Practice 2-4 **Reasoning in Algebra****Use the given property to complete each statement.****1. Symmetric Property of Equality**If $MN = UT$, then ? .**2. Division Property of Equality**If $4m\angle QWR = 120$, then ? .**3. Transitive Property of Equality**If $SB = VT$ and $VT = MN$, then ? .**4. Addition Property of Equality**If $y - 15 = 36$, then ? .**5. Reflexive Property of Congruence** $\overline{JL} \cong$? **Give a reason for each step.**

6. $7x - 4 = 10$

$7x = 14$

$x = 2$

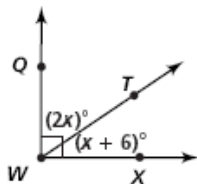
7. $0.25x + 2x + 12 = 39$

$2.25x + 12 = 39$

$2.25x = 27$

$225x = 2700$

$x = 12$

Name the property that justifies each statement.8. If $m\angle G = 35$ and $m\angle S = 35$, then $m\angle G \cong m\angle S$.9. If $10x + 6y = 14$ and $x = 2y$, then $10(2y) + 6y = 14$.10. If $TR = MN$ and $MN = VW$, then $TR = VW$.11. If $\overline{JK} \cong \overline{LM}$, then $\overline{LM} \cong \overline{JK}$.12. If $\angle Q \cong \angle S$ and $\angle S \cong \angle P$, then $\angle Q \cong \angle P$.**Fill in the missing information. Solve for x , and justify each step.****13.**

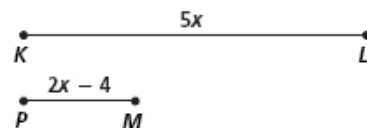
$m\angle QWT + m\angle TWX = 90$

$2x + (x + 6) =$?

 ? + 6 = 90

 ? = ?

$x =$?

14.

$KL = 3(PM)$

$5x = 3$?

$5x =$?

 ? = -12

$x =$?