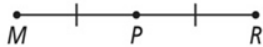


Given the following statements, Name the definition, postulate or theorem that justifies the second statement.

1. P is the midpoint of \overline{MR}
 $\overline{MP} \cong \overline{PR}$



1. _____

2. $\angle 1$ and $\angle 2$ are a linear pair
 $\angle 1$ and $\angle 2$ are supplementary

2. _____

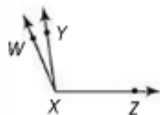
3. $AB = BC$ and $DE = EF$
 $AB + DE = BC + EF$

3. _____

4. $\angle 1 \cong \angle 2$
 $\angle 2 \cong \angle 1$

4. _____

5. $m\angle WXY + m\angle YXZ = m\angle WXZ$



5. _____

6. $6(x + 4)$
 $6x + 24$

6. _____

7. $\angle 5$ & $\angle 6$ are complementary
 $\angle 6$ & $\angle 7$ are complementary
 $\angle 5 \cong \angle 7$

7. _____

8. $\overline{MN} \cong \overline{PQ}$ and $\overline{PQ} \cong \overline{RS}$
 $\overline{MN} \cong \overline{RS}$

8. _____

9. $\overline{EF} + \overline{FG} = \overline{EG}$

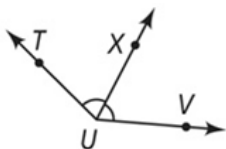


9. _____

10. $\angle 3$ & $\angle 4$ are supplementary
 $m\angle 3 + m\angle 4 = 180$

10. _____

11. \overline{UX} bisects $\angle TUV$
 $\angle TUX \cong \angle XUV$

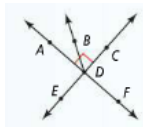


11. _____

12. $m\angle 3 = m\angle 4$
 $\angle 3 \cong \angle 4$

12. _____

13. $\overline{CE} \perp \overline{AF}$ at point D
 $\angle CDF$ is a right angle



13. _____

14. $\angle ABC$ & $\angle DEF$ are supplementary
 $\angle DEF$ & $\angle HIJ$ are supplementary
 $\angle ABC \cong \angle HIF$

14. _____

15. $m\angle 1 = m\angle 2$ and $m\angle 3 = m\angle 4$
 $m\angle 1 - m\angle 3 = m\angle 2 - m\angle 4$

15. _____

Use each property to complete each statement

16. Symmetric Property: If $\overline{DE} \cong \overline{GI}$, then _____
17. Transitive Property: If $m\angle A + m\angle C = m\angle F$ and $m\angle F = m\angle H$, then _____
18. Substitution Property: If $m\angle Q - m\angle R = 65$ and $m\angle Q = m\angle T$, then _____
19. Reflexive Property: $XY =$ _____
20. Addition Property: If $m\angle N = m\angle S$ and $m\angle B = m\angle D$, then _____
21. Subtraction Property: If $AB + 5 = CD + 5$, then _____
22. Multiplication Property: If $\frac{CD}{3} = 20$, then _____
23. Division Property: If $5KL = 60$, then _____
24. Transitive Property: If $AB = 9$ and $CD = 9$, then _____
25. Substitution Property: If $XM + YZ = 75$ and $YZ = 30$, then _____