Geometry

Name _____

2.7 Proving Segments Congruent

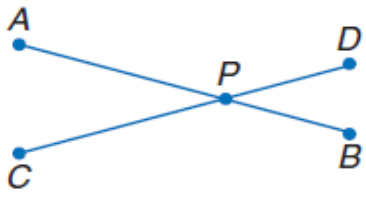
Date _____ Hour _____

2. PROOF Prove the following.

Given: $\overline{AP} \cong \overline{CP}$

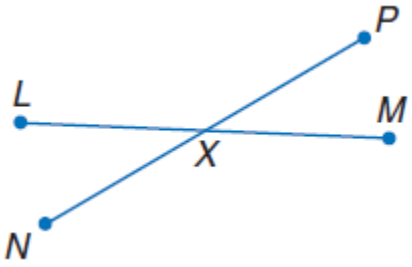
$\overline{BP} \cong \overline{DP}$

Prove: $\overline{AB} \cong \overline{CD}$



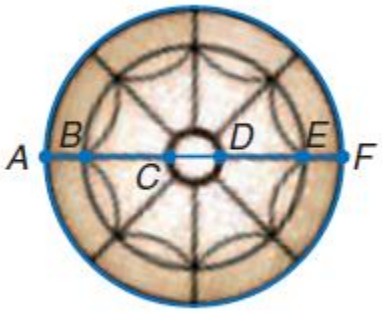
Statements	Reasons

8. If $\overline{LM} \cong \overline{PN}$ and $\overline{XM} \cong \overline{XN}$, then $\overline{LX} \cong \overline{PX}$.



Statements	Reasons

11. LIGHTING In the light fixture, $\overline{AB} \cong \overline{EF}$ and $\overline{BC} \cong \overline{DE}$. Prove that $\overline{AC} \cong \overline{DF}$.



Statements	Reasons

17. REVIEW Haru made a scale model of the park near his house. Every inch represents 5 feet. If the main sidewalk in his model is 45 inches long, how long is the actual sidewalk in the park?

F 225 ft

G 125 ft

H 15 ft

J 5 ft

18. REVIEW Which expression is equivalent to $\frac{12x^{-4}}{4x^{-8}}$?

A $\frac{1}{3x^4}$

B $3x^4$

C $8x^2$

D $\frac{x^4}{3}$