Given: AB = BC Prove: AC = 2BC	A B C
AB = BC AC = AB + BC	Given Segment Addition Postulate
AC = BC + BC	Substitution
AC = 2BC	Substitution

XXXXXX	Given: $\overline{AP} \cong \overline{CP}$ $\overline{BP} \cong \overline{DP}$ Prove: $\overline{AB} \cong \overline{CD}$	A D B	1 2 y
13 18	$\overline{AP} \cong \overline{CP}$	Given	5 4
18	$\overline{BP} \cong \overline{DF}$	Given	7 %
X	AP = CP	Definition of Congruent Segments	9 10
2	BP = DP	Definition of Congruent Segments	X X
	AP + PB = AB	Segment Addition Postulate	JS VA
	CP + DP = AB	Substitution	(5)K
	CP + PD = CD	Segment Addition Postulate	17 18
	AB = CD	Transitive Property	<i>y</i> 1
	$\overline{AB} \cong \overline{CL}$	Definition of Congruent Segments	