Lesson 8.5

Practice Level C

1. yes; no **2.** no **3.** yes; yes **4.** 107° **5.** 129°

6. 68° **7.** 20.5 **8.** 20 **9.** 7

10. $m\angle E = m\angle T = 118°$ **11.** $m\angle T = 113°$, $m\angle W = 97°$

12. $m\angle E = 88°$, $m\angle S = 77°$

13. $EW = ES = \sqrt{58}$, $ST = WT = \sqrt{109}$

14. $PQ = PS = \sqrt{157}$, $QR = SR = 2\sqrt{58}$

15. $EH = EF = 3\sqrt{34}$, $HG = FG = 9\sqrt{5}$

16. 2.5 **17.** 4.5 **18.** 6.2

19. 60°, 60°, 120°, 120°

20. The sum of the lengths of the two bases is 12.

21. Given; Definition of rectangle; $\angle ILB \cong \angle ROD$; Opposite sides of $\square$ are $\cong$.; $\overline{LB} \cong \overline{DO}$; SAS Congruence Postulate; $\overline{BI} \cong \overline{DR}$; $\overline{BD} \parallel \overline{IR}$; Definition of isosceles trapezoid

22.

Statements	Reasons
1. $\overline{AF} \ncong \overline{BC}$	**1.** Given
2. $\triangle ABC \cong \triangle CDA$	**2.** Given
3. $\angle CAB \cong \angle ACD$	**3.** Corresp. parts of $\cong$ $\triangle$'s are $\cong$.
4. $\overline{CF} \parallel \overline{AB}$	**4.** Alternate Interior $\measuredangle$ Thm. Converse
5. $ABCF$ is a trapezoid.	**5.** Definition of trapezoid