

Answer Key

Lesson 5.5

Practice Level C

1. smallest, $\angle A$ and $\angle B$; largest, $\angle C$
2. smallest, $\angle R$; largest, $\angle P$ 3. smallest, $\angle H$; largest, $\angle G$ 4. shortest, \overline{RS} ; longest, \overline{ST}
5. shortest, \overline{KH} and \overline{KJ} ; longest, \overline{JH}
6. shortest, \overline{AC} ; longest, \overline{CB} 7. $x > 4$ 8. $x > \frac{3}{2}$
9. $12 < x < 21$ 10. $5 < x < 11.5$

11.  12. \overline{CD} , \overline{BC} , \overline{BD} , \overline{AB} , \overline{AD}

13. \overline{DE} , \overline{AE} , \overline{AD} , \overline{AB} , \overline{BD} , \overline{BC} , \overline{CD}

14. $0 \text{ ft} < x < 12 \text{ ft}$ 15. $4 \text{ in.} < x < 14 \text{ in.}$

16. $5 \text{ yd} < x < 17 \text{ yd}$ 17. $60 \text{ in.} < x < 108 \text{ in.}$

18. 600 feet 19. It is shorter to cut across the park because the sum of the lengths of the two sidewalks is greater than the length of the diagonal across the park. 20. $\overline{RT} \perp \overline{TS}$, so $\triangle RTS$ is a right triangle. The largest angle in a right triangle is the right angle, so $m\angle RTS > m\angle RST$, so $RS > RT$.

(If one angle of a triangle is larger than another angle, then the side opposite the larger angle is longer than the side opposite the smaller angle.)