

SM2H 7.5 – 7.9 Quiz Review Key

1. Yes, AA, ΔRQS
2. Not similar
3. 76°
4. 128°
5. $\frac{3}{4}$
6. $n = 4.5$
7. $t = 12$
8. $x = 3$
9. $y = 5$
10. $x = 24$
11. $y = 11$
- 12.

Statements	Reasons
1. $l \parallel m$	1. Given
2. $\angle 1 \cong \angle 2$	2. Alternate Interior Angles Theorem
3. $\angle 3 \cong \angle 4$	3. Vertical Angles Theorem
4. $\Delta ABC \sim \Delta EDC$	4. AA Similarity Postulate

13. Isosceles Trapezoid
14. Rectangle
15. Kite
16. Parallelogram
17. Square
18. $x = 16$
19. $x = 17, y = 5$
20. $y = 16$
21. $x = 9$
22. $x = 6$
23. $x = 17$
24. $x = 17^\circ, y = 90^\circ$
25. Yes, diagonals bisect each other.
26. Yes, both pairs of opposite sides are parallel.
27. Yes, both pairs of opposite angles are congruent.
28. Yes, one pair of opposite sides are both parallel and congruent.
29. Yes, both pairs of opposite sides are congruent.

30.
 - a) 90° - Rectangles have four right angles.
 - b) 48° - Base angles of isosceles trapezoids are congruent.
 - c) $\angle HEF$ and $\angle CDF$ are corresponding angles, so they are congruent.
 - d) 132° - Consecutive angles are supplementary.
 - e) 24 - Opposite sides of a parallelogram are congruent.
 - f) 24 - Opposite sides of a rectangle are congruent.
 - g) $AD = 2 \cdot 24 = 48$. The given formula was $AD = 2 \cdot BC$.
 - h) 36