

Answers to Chapter 9 Test Review

1. SAS
2. 58°
3. 61°
4. $\overline{EF} \cong \overline{QR}$
5. SAS, HL, SSS
6. Will depend how you label vertices, but right angles are B and X and C is common angle then: $\overline{AB} \cong \overline{CX}$ $\overline{EF} \cong \overline{QR}$
 $\overline{EF} \cong \overline{QR}$ $\angle B \cong \angle X$ $\angle BAC \cong \angle XCY$
 $\angle ACB \cong \angle CYX$
7. SSS, SAS, ASA, AAS, HL
8. 13.4
9. (1, -2)
10. $\triangle ABC \cong \triangle XYZ$
11. (3, 4, 5) (5, 12, 13) (8, 15, 17) (7, 24, 25)
are just a few
12. SSS
13. HL or SSS
14. AAS
15. 68°
16. 32
17. $\triangle EDF$
18. 13
19. A, B, C
20. (-3, -1)
21. (5, 1)
22. 71.06 sq. un.
23. 29.58
24. Yes, $JZ = FZ$ b/c iso tri thrm, since $JQ=FX$ (given) and $QX=QX$ (reflexive), $JX=FQ$ (seg add post and sub), $\angle J=\angle F$ (given) so $\triangle JZX \cong \triangle FZQ$ by SAS
25. Slope(m) of $RE=3/2$, m $TC=3/2$, m $EC=-2/3$, m $RT=-2/3$. Opp. Sides have same slope so opp sides parallel. Consecutive sides' slopes are opp reciprocals, so $RE \perp EC$. Parallelogram with a right angle is a rectangle.
26. directions
27. $a_n = 12n + 11, a_{15} = 191$
28. $a_n = 5(6)^{n-1}, a_{15} = 391,820,820,500$

29. $y = 325,000(0.85)^t$. \$46,228.57

